DOCUMENT RESUME

ED 104 700 SE 018 978

TITLE	METRO-APEX Volume 4.1: County Politician's Manual. Revised.
INSTITUTION	University of Southern California, Los Angeles. COMEX Research Project.
SPONS AGENCY	Environmental Protection Agency, Research Triangle Park, N.C. Control Programs Development Div.
PUB DATE	74
NOTE	141p.; Update to ED 064 534. Related documents used in METRO-APEX 1974 are SE 018 975 - 995. Best Copy Available; Occasional Marginal Legibility
AVAILABLE FROM	The METRO-APEX computer program described in this abstract is available from COMEX Project, The John and Alice Tyler Building, 3601 South Flower Street, Los Angeles, California 90007
EDRS PRICE	MF-$0.76 HC-$6.97 PLUS POSTAGE
DESCRIPTORS	City Problems; Computer Assisted Instruction; *Computer Programs; *Environmental Education; Environmental Influences; Games; Government Role; *Higher Education; Management Games; Pollution; Professional Training; Role Playing; Simulated Environment; *Simulation; *Urban Environment
IDENTIFIERS	COMEX Project; *Environmental Management

ABSTRACT

The County Politician's Manual is one of a set of twenty-one manuals used in METRO-APEX 1974, a computerized college and professional level, computer-supported, role-play, simulation exercise of a community with "normal" problems. Stress is placed on environmental quality considerations. APEX 1974 is an expansion of APEX--Air Pollution Exercise (ED 064 530-550; ED 075 261; ED 081 619), and includes roles for an environmental quality agency, water quality manager, solid waste manager, and various pressure groups, in addition to the previously developed roles of city and county politicians, city and county planners, air pollution control office, developers, industrialists and newspaper. Two industries have been added, as have a number of program options. The participants may range in number from 17 to 100. Each run of the game should consist of at least three cycles (simulated years), the optimum being five cycles. Each cycle should span at least a three-hour period. A cycle is composed of two major phases: the first is the game simulation; in the second phase, decision emerging out of the game simulation are analyzed by a computerized system of integrated simulation models. The METRO-APEX computer program is in Fortran IV and runs on an IBM 360-50 or higher series computer. (BT)

ED104700

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

METRO: APEX

volume 4.1

COUNTY POLITICIAN'S MANUAL

2

revised 1974

SE 018 978

BEST COPY AVAILABLE

ED104700

BEST COPY AVAILABLE

METRO-APEX

1974

A Computerized Gaming Simulation Exercise
For Training in Environmental Management
and Urban Systems

Developed by the
COMEX Project
University of Southern California

through a grant form the
Control Programs Development Division
Environmental Protection Agency

A revised version of the APEX Air Pollution Exercise
developed jointly by the
COMEX Project, University of Southern California
and
Environmental Simulation Laboratory, University of Michigan
June 1974

ACKNOWLEDGMENTS

COMEX Project
School of Public Administration
University of Southern California

Dr. W. William Leffland,
Co-Principal Investigator
(1966-1970)

Richard T. McGinty,
Principal Investigator
(1970-1974)

Staff

Mark James
Robert Ross
Andrew Washburn
Jolene Elliott
Wesley Bjur
Alan Forrest
Charles Pratt
Corinne Floyd
Alan Freditor
Ira Robinson
Frank King
Gilbert Siegel
Aubrey Boyd

Environmental Simulation Laboratory
School of Natural Resources
The University of Michigan

Dr. Richard D. Duke,
Co-Principal Investigator
(1966-1970)

Staff

Roy Miller
Stewart Marquis
Donald Kiel
Thomas Borton
Paul Ray
Marlyn Miller
James Reeds
Anne Cochran
Ferdinand Dijkstra
David Specht
David Kaueper
Katherine Fenn
Ellen Pechman

TABLE OF CONTENTS

Acknowledgements	iii
Preface	iv
Chapter 1 A Brief Description of APEX County	1-1
Chapter 2 Glossary and Reference Terms	2-1
Chapter 3 Role Description	3-1
Chapter 4 Annotated Worksheet	4-1
Chapter 5 Worksheet	5-1
Chapter 6 Background Information	6-1
Chapter 7 References	7-1
Chapter 8 Annotated Printout	8-1

PREFACE

PREFACE

METRO-APEX is the result of a long term research and development effort by a number of dedicated individuals. The inspiration, and much of the technical basis evolved from a similar exercise (M.E.T.R.O.) originally developed by the Environmental Simulation Laboratory, University of Michigan. In 1966, a grant from the Division of Air Pollution Control, U.S. Public Health Service was awarded to the COMEX Research Project, University of Southern California, to develop a dynamic teaching instrument, METRO-APEX. Working in close cooperation, the COMEX Research Project and the Environmental Simulation Laboratory successfully developed the initial version of the METRO-APEX exercise in 1971. This computer-based gaming simulation was designed to provide a laboratory urban community in which air pollution management trainees could apply and test the knowledge and skills gained through conventional educational methods.

METRO-APEX has proven to be highly adaptable to training programs dealing with the many aspects of air pollution control including law, management, air quality monitoring, land use planning, budget preparation, citizen participation programs, state and federal grant procedures, and political decision-making processes. As a result, METRO-APEX is in great demand as a valuable supplement to university training programs, and in many cases is being used as a central curriculum focus. Over 60 universities have been trained in the use of METRO-APEX. It has also been translated into French and Spanish and is being used in seven countries outside of the United States.

Based on the success of the initial METRO-APEX program, COMEX was awarded a grant from the Control Programs Development Division of the Environmental Protection Agency to substantially revise and broaden the simulation exercise to encompass the wide spectrum of environmental management issues. This current version, of which this manual is a part, was completed in June 1974 and greatly increases the utility and teaching potential of the exercise. In this version, the interrelationships among air, water and solid waste are demonstrated, the strategies and options available to players have been broadened, new roles have been added, the exercise materials have been updated to reflect the latest technology and nomenclature, and many of the operational problems associated with the earlier version have been rectified.

METRO-APEX is one of, if not the most complex gaming-simulations of an urban area in use today. Although it was designed to supplement standard teaching methods, APEX is far more than an educational tool. It is a communication channel of a new level--capable of providing both the language and the forum for information transfer between persons and groups with different educational and cultural backgrounds as well as different perspectives of the urban situation.

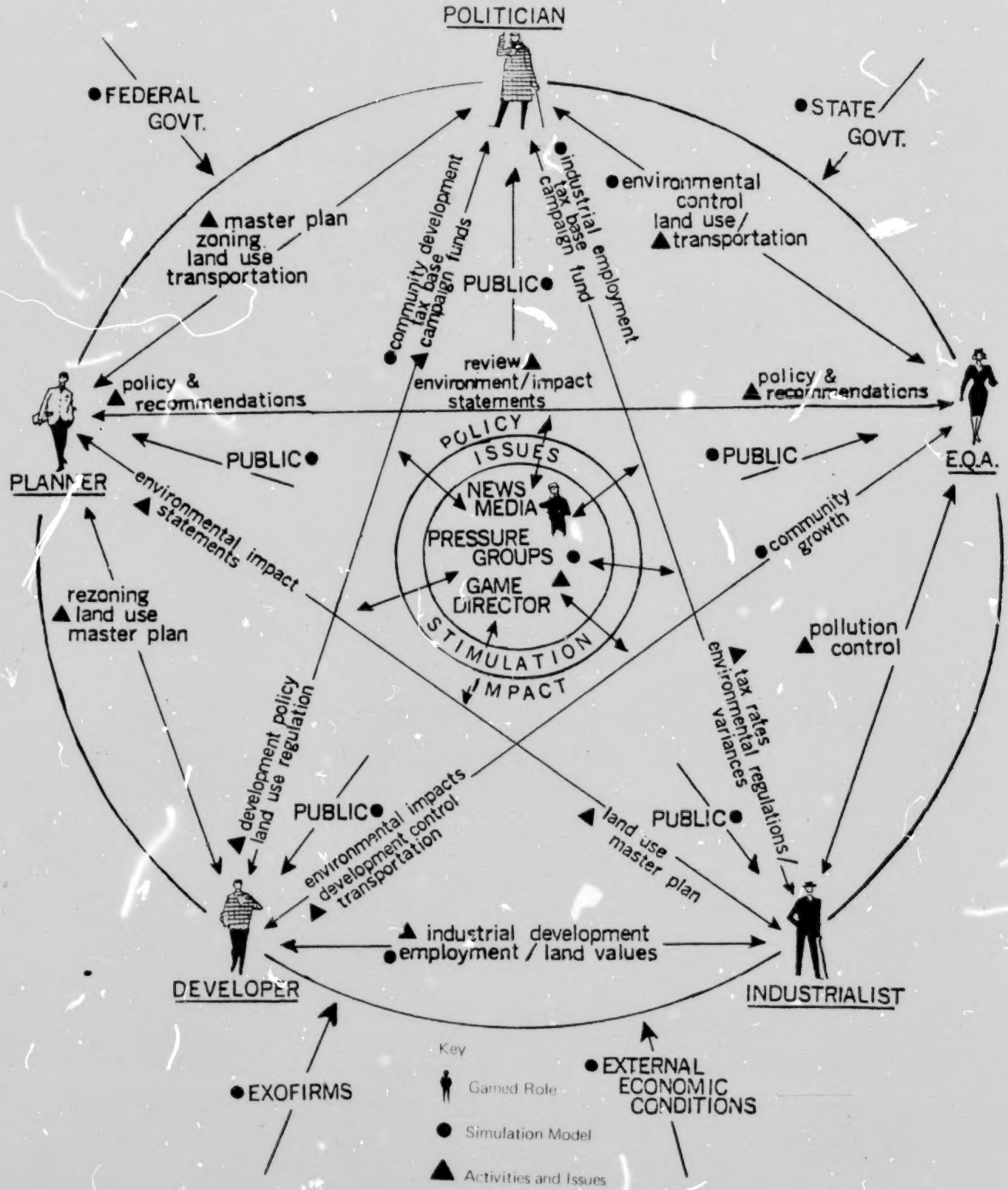
METRO-APEX is composed of two essential components: (1) a computerized system made up of a series of well-integrated simulation models linked to a (2) "gamed" environment encompassing a series of interactive roles. The computerized system predicts the changes that occur in several sectors of the urban system in response to the decisions made by participants in the "gamed" environment, decisions made by persons outside the "gamed" environment (other actors whose behavior is simulated in the computer), and external pressures on the metropolitan area (also simulated in the computer).

The County of APEX is run year by year by principle decision makers performing both the mundane and extraordinary functions of their office in the "gamed" environment. Each cycle or year is condensed in time to a three to eight hour session during which the decision makers formulate their yearly policy. The decisions that emerge out of the "competitive--cooperative" environment of the gaming-simulation are used as priming inputs to the computer simulation. The change in the status of the urban area is calculated by the computer and returned to the decision makers as the primary input to the next cycle of action. Included in the change picture generated by the computer are selected social, economic and physical indicators which show the magnitudes of change in key areas and a newspaper which serves as the focal point of local public opinion.

The key decision makers acting in the gamed environment include an Environmental Quality Agency with departments of Air Pollution, Water Pollution and Solid Wastes; Politicians, Planners and Administrative Officers from a Central City and a County; Land Developers and Industrialists from the private sector; and representatives from the News Media and Pressure Groups. The Politicians are responsible for the administration of their respective jurisdictions and for the formulation and implementation of various programs to upgrade the social status of their constituents. The Planners serve as aides to the Politicians and represent the major long range coordinating force in the community. The Environmental Control Officers are charged with the task of monitoring and alleviating the pollution problems. The private business sectors operate to foster their own interests and frequently those of the community. Pressure Groups and News Media advocate various positions on community issues. Generally, each decision maker finds it to his advantage to coordinate and/or compete with other players in his efforts to promote his strategies. The METRO-APEX General Interaction Diagram included here indicates possible linkages among the roles.

In general, people have great difficulty understanding the dynamics of a complex system through traditional means. Gaming-simulation offers participants the opportunity to study, work with, and discuss the structure of such a system and to experiment with intervention strategies designed to change that structure. When used as a teaching device, the strength of a gaming-simulation such as METRO-APEX lies in the opportunity afforded participants for involvement in the system. When compared with the passive observation of the system offered by traditional methods, this approach has had great success.

METRO-APEX INTERACTION DIAGRAM



CHAPTER 1

A Brief Description of

APEX County

Chapter 1

A BRIEF DESCRIPTION OF APEX COUNTY

History

The first settlers of APEX County were farm families emigrating from New England and New York State beginning about 1830. During the middle of the nineteenth century, German immigrants continued the settlement patterns of established dispersed family farms. Income to pay for the necessary imports of products from the East was derived primarily from the production of farm crops and, more importantly, timber. Small market towns, often containing milling facilities, developed between 1820 and 1860. At the same time, the County was organized as a unit of government by the State, and the basic network of roads was completed.

The major impetus for the later development of the Central City as a regional center was its selection as the state capitol in 1847. The nation's first land-grant university was established east of the Central City in 1855, further enhancing its growth. Central City was incorporated in 1859 and the Suburb, in which the university was located, was incorporated in 1910. The University's control of a large block of land was to exercise profound influence on the future physical pattern of development. Much of the logical development corridor outward from the City was preempted by this facility.

Steam railroads were first built into APEX County beginning in the 1860's. Those small market-milling communities with stops and depots on the rail lines began to assume a greater importance than the small communities away from the lines. The impact of the railroads on the small communities can be seen from the following description of Central City:

> By the year 1863, the City...was a bustling, urban center. Early accounts tell us that, at that time, the City included eleven churches, five hotels, two flouring mills, three tanneries, two breweries, three saw mills, two sash and blind factories, three iron foundries, two printing offices, several brick yards, and a large number of mechanic shops.*

Although growing, it should be noted that manufacturing was still minimal. Exports were dominated by agricultural and timber products, and most other production was for local consumption only.

---

*Tri-County Regional Commission, "History of the Tri-County Region," Information Report 7, updated. pp. 24-25.

Beginning in perhaps 1880, factories producing goods to be exported out of the region were built in the area, fostered by the completion of railroad ties with the rest of the country. These factories, mainly built near railroad depots, stimulated the migration of factory-worker families into the region. Most of these families settled near the factories where they were employed, adding further to the growth of the towns near the railroad. Just before the turn of the century the introduction of the automobile industry into Central City gave the final impetus needed to make Central City into the dominant community in the County. Beginning about the same time, electric interurban railways were extended from Central City to the north, east and west, allowing many workers from the new industries in the City to move further away from their place of employment.

By the 1920's, automobiles had become readily available and their use was encouraged by the paving of most of the roads in the County. Those who had formerly lived fairly close to the interurban system began to be dispersed throughout larger areas and to settle in lower density neighborhoods. Until about 1930, most new development was found in the filling-in of the Central City and Suburb. Although the growth of industrial and bureaucratic functions proceeded in the Central City and the area adjacent to it, the more outlying townships remained, and to some extent still remain, predominantly agricultural. The growing urbanization which has occurred more recently in these fringe areas has been primarily stimulated by the construction of the interstate expressway system beginning in the 1950's.

The interstate highway freeway system in APEX County is shown on the map at the end of this chapter. One major expressway comes from the southeast, sweeps around the southern and western fringes of the City and leaves the County from its northwestern corner. A second expressway comes up from the south, intersects the first and continues northward into the Suburb. It is anticipated that in the future this expressway will be continued northwards, then swing west to finish an expressway loop around the City (dashed line).

In addition to the airport, major transportation into and out of APEX County is provided by rail (primarily freight) and expressway. The attached map outlines the routes of the three rail lines, which generally follow the river valleys and intersect in Analysis Area 8.

A local APEX bus line serves the Central City, with some service extended into the Suburb and nearby areas of the County.

Most travel in APEX is currently by private automobile. There are approximately 2.1 people per registered automobile in APEX. This amounts to approximately one billion automobile miles per year. The automobile is the cause of substantial congestion, property damage, death and air pollution in APEX. Further information about the contribution of the automobile to pollution can be obtained from the Air Pollution Control Officer.

The automobile represents an immense financial burden to owners, political jurisdictions, employers and commercial establishments. Taxes to expand and maintain the road network are constantly expanding. Vast areas of land are required for parking. At the same time, bus ridership is decreasing.

Political Jurisdictions

In the METRO-APEX game, the County is composed of four autonomous jurisdictions: The Central City, Suburb, Township 1 and Township 2. The County has been further divided into 29 "Analysis Areas", each resembling a census tract. The Central City comprises Analysis Areas 1 through 13; the Suburb, AA's 17 through 19; Township 1, to the west, contains AA's 23 through 28 and Township 2, to the east, contains AA's 14-16, 20-22 and 29. (See map). In addition to analysis areas, the Central City is politically divided into Wards:

Ward 1 -- AA's 1-4
Ward 2 -- AA's 5-8
Ward 3 -- AA's 9-13

Each Ward is the electoral district for one of the three City Council seats represented in the game. The County government (Board of Supervisors) is comprised of members elected from the Suburb, from the Townships, from the County-at-large and the Central City-at-large.

The City Council and County Board of Supervisors are the only two local governmental units actively represented in the game. Other local governments, including the school boards, are simulated. In some cases, City and County governments have parallel functions; e.g. they both provide police services, planning and capital improvements. The County however, has area-wide responsibility for three major services not provided by the City government: public health, welfare and pollution control. In these three areas, County actions, directly affect Central City residents as well as residents in the outlying areas. Both the municipal and County governments derive their primary financial support from the same tax base--real property. County property taxes are paid by land-owners, in addition to property taxes collected by the municipal government and the school board in each political jurisdiction.

Data provided to players in the game are nearly always given by analysis area--this is also the smallest unit of scale in referring to locations; that is, a project or house or industry is located in "Analysis Area X" rather than on a particular street or a particular intersection. Characteristics of each individual analysis area, including the socio-economic composition of the residents and the proportions of land area devoted to particular land uses, may be found in the Planners data.

A few analysis areas are almost completely chacterized by one or two major features which are often referred to throughout play. These major features are given in the following list, with their analysis areas indicated:

Central Business District (CBD) -- nearly all of Analysis Area 8

State Capitol -- Analysis Area 8

Ghetto -- Analysis Area 4 and Analysis Area 8

University -- Analysis Area 19 (all)

"Best" residential areas -- Analysis Areas 9 (all) and 17 (most)

These features are not only unique in the County, but they also dominate the analysis areas in which they are located; in the game they are likely to be referred to as locations in themselves, with no further locational explanation given.

A list of other important man-made features of the County, and their locations, is given later in this chapter.

Geography and Climate

APEX County is located nearly at the center of an industrialized northern State, some 85 miles northwest of one of the largest metropolitan areas in the United States. The once heavily forested land, extending roughly 320 square miles, is quite flat and for the most part adequately drained for agriculture.

The Great River, a major watercourse in the State, enters the County from the south in Analysis Area 23, meanders north and west, then back to the east and north as it passes through Analysis Area 8. There it is joined by the Red Oak River, which comes in from the east. The enlarged Great River exits from the County in Analysis Area 26, from which it continues west for some 85 miles before emptying in to the Great Lakes. Major drainage of the County is through the Great River system.

Just before it empties into the Great River, the Red Oak River is joined by Sycamore Creek, which wanders up from the southeast. Much of the area in Analysis Areas 11 and 13, near this creek, is low and somewhat marshy, not ideal for heavy development. The other major marshy area in the County is in Analysis Area 14, to the northeast in Township 2. There are also several small lakes in this analysis area and quite a large State Park. The largest lake

in the County is located in Analysis Area 16. This was a primary recreation area in the early part of this century but is less ideal now, due to heavy pollution loads and deteriorating shoreline development. There are small creeks which wander through many analysis areas in the County. The only other river of any significant size, however, is Looking Glass River, which runs east and west through the northern portion of the County, primarily in Analysis Areas 28 and 29.

The climate of APEX County is temperate, with summer temperatures averaging about 70 degrees and winter temperatures which average about 25 degrees. There is an annual rainfall of roughly 41 inches, with heavy snows to be expected primarily in the months of January and February. Prevailing winds are westerly, swinging to the southwest in summer and northwest in winter.

Major Public Facilities

As might be expected, the Central City and Suburb are significantly better endowed with public capital improvements than are the Townships. The following list includes the most important public structures in the County, and indicates under whose jurisdiction they are operated and where they are located:

Airport (County) -- AA 29, just outside the City limits. The Airport has three runways and a terminal of 27,000 square feet. Two commercial airlines serve the County through this airport; cargo and general aviation are also served.

Boys Training School (State) -- AA 7.

City Hall -- AA 6. This is an old structure, built 80 years ago and considered a scandal. A more central location has been chosen for the new City Hall under construction in AA 8.

Community Centers (City) -- AA's 2, 4, 7, 8, 10, 13. These are mostly old houses purchased by the City to house neighborhood meetings and the operation of special programs.

Community Centers (Township Halls) -- AA's 14 (2), 24, 27, 29.

Community College (County) -- AA 8. The facility is currently housed in an old library and elementary school.

County Building -- AA 8, This includes all County offices and the meeting rooms for the County Board of Supervisors.

County Court House -- AA 8, adjacent to County offices.

Fire Stations (City) -- AA's 2, 3, 4, 5, 6, 8 (2), 11, 12.

Fire Stations (Townships) -- AA's 20, 23, 25. These are modest stations housing limited equipment. Volunteers provide firefighting manpower.

Hospital (County) -- AA 7. This was built in 1912 and was expanded in 1922, 1942, and 1960. It contains 362 beds, including a 35-bed tuberculosis wing, and caters primarily to the indigent. There are three private hospitals in the County with an additional 650 beds.

Library (City) -- AA 8. This is an old downtown building. There are branch libraries in AA's 1, 5, 11, 12 (2), 13.

Library (Suburb) -- AA 18.

Sewage Treatment Plant (City) -- AA 2. This plant provides both primary and secondary treatment and has a capacity of 34 million gallons per day. It currently averages 22 million gallons daily.

Sewage Treatment Plant (Suburb) -- AA 19. This plant provides primary sewage treatment, with a capacity of 12 million gallons per day; it currently handels an average of 6.75 million gallons daily.

Sheriff Station (County) -- AA 8. This is attached to the County Building.

Water Treatment Plant (City) -- AA 8. Water for the City is derived from the Great River as it exits from Analysis Area 8. Capacity is 42 million gallons per day, with the average daily flow currently being 22 million gallons. Treatment includes filtration, purification, flouridation and lime softening.

Water Treatment Plant (Suburb) -- AA 19. The Suburb's water is drawn from the Red Oak River as it enters AA 19. Capacity is 6 million gallons daily.

with current average flow being 2.5 million gallons per day. Treatment includes chlorination, fluoridation and ziolite softening.

Zoo (City) -- AA 7.

Industry and the Economy

Major employment in APEX County is provided by the State Capitol Complex, the University and a automobile assembly plant, located in Analysis Area 4. While State Government is a stable, slow-growing industry, the University, typical of "research and development" operations elsewhere, is growing at a very rapid rate. The automobile plant exhibits characteristics similar to any large manufacturing operation, fluctuating considerably in response to the national business cycle.

In addition to these "big three" employers, there is a host of industries supplying parts to the automobile industry, as well as independent industries exporting goods which have no relationship to autos. (A map and listing of the major industries in the County are found on the following two pages.) These include the seven gamed industries:

Industry 1 -- Shear Power Company
Industry 2 -- People's Pulp Plant
Industry 3 -- Rusty's Iron Foundry
Industry 4 -- Gestalt Malt Brewery
Industry 4 -- Caesar's Rendering Plant
Industry 6 -- Dusty Rhodes Cement
Industry 7 -- Schick Cannery

Members of the population of APEX County constitute a work force of about 101,000 people, nearly half of them employed by the major "exporting" industries previously mentioned. About 9% of total County employment is found in lighter industry and 41% in commercial and service activities for the resident population. The greatest concentration of manufacturing employment is, as expected, found in the Central City. The highest proportion of white collar workers is in the Suburb, due to the predominance of the University as an employer there. In the futute, it is probable that more and more new industrial growth and employment will occur in outlying areas, particularly among firms requiring significant amounts of land for their plants.

Population

Within the physical and political environment described in the

preceding pages resides a population of some 227,000 persons, a tiny fraction of whom are represented in METRO-APEX as players. The remainder of the population is simulated by the computer in the game. About 63% of the population resides in the Central City, 10% in the Suburb and the remainder in the two Townships.

Only about 9.2% of the County's population is black; however, virtually all of this population is found in the Central City, of which 14.4% of the total population is black, primarily in Ward 1, where the number of non-white households approaches 38%. The only other significant ethnic minority is found in a Mexican-American community in the east-central portion of the city.

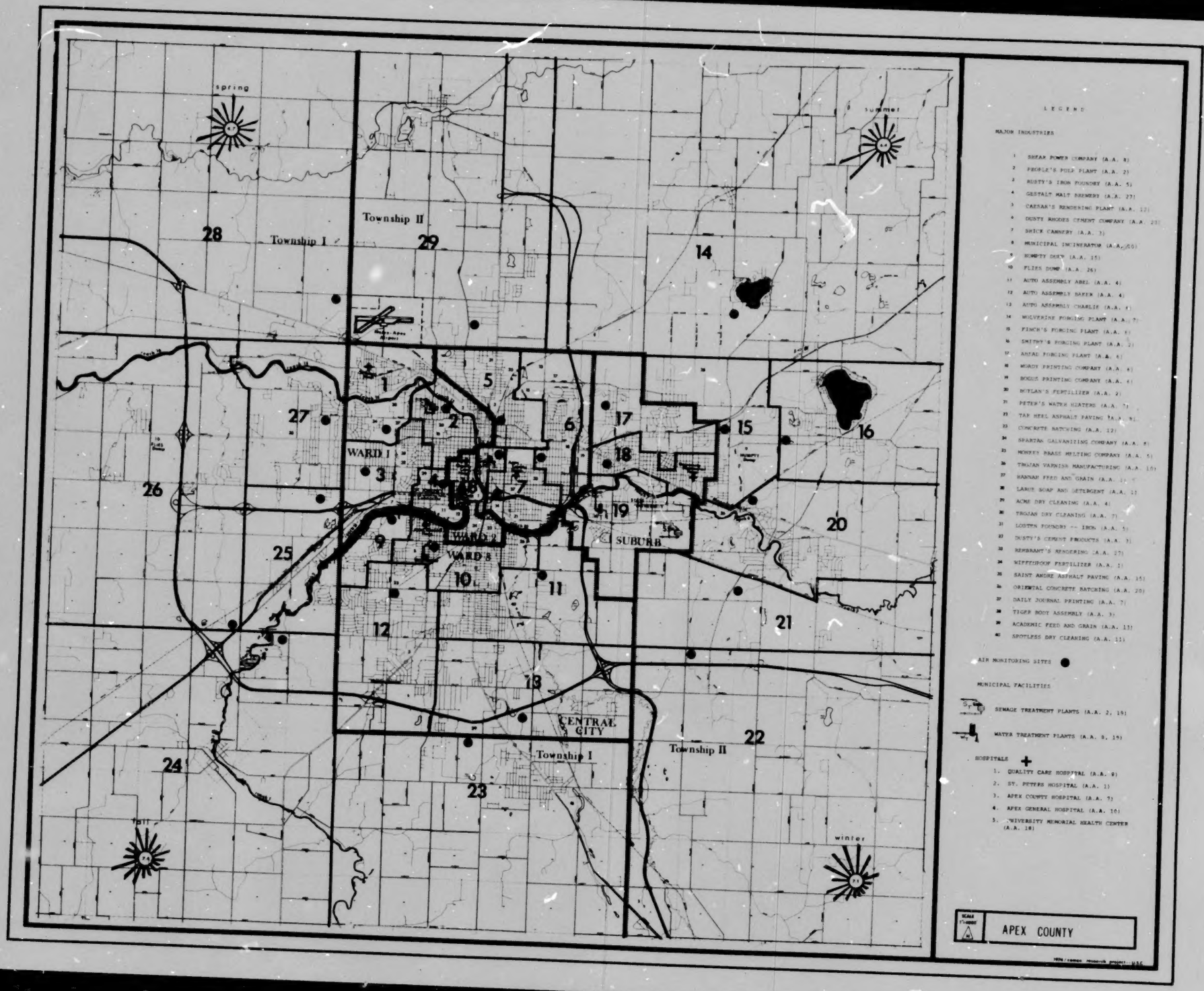
For purposes of the game, the population of APEX County has been divided into five "household types", each representing different occupations and educational achievements, life-styles, voting habits and consumption behavior. These will be described briefly here; more detailed information about each may be found in the Glossary.

Household type 1 is a combination of upper and upper-middle class families whose head of household are likely to be employed in the professions and business management. Household type 2 is typical middle class, occupations usually clerical and lower-level public service areas. Household type 3 includes very low white-collar workers and skilled craftsmen and shop foremen, the latter two predominately. While members of household types 1 and 2 have attended college, some with advanced degrees, household type 3 members are typically high school graduates. In outlying areas, farmers are included in this latter type. In household type 4 are found semi-skilled workers and non-domestic service workers. Usually household heads have not completed high school, and while many household type 4's are homeowners, the value of their housing is quite low. Household type 5 includes laborers, domestic workers and the unemployed, with a large number of the elderly. A majority of these households live in rental units of low value.

Initially, about 17.5% of the County population is found in household type 1, 16% in household type 2 and 27% in type 3; about 32% is of household type 4 and 7.5% fall into household type 5. The household composition of a particular analysis area, and of an entire jurisdiction, will affect significantly the demand for both public and private goods and services. It will also affect voting behavior on financial issues and in elections.

List of Major Industries

1. Shear Power Company (A.A. 8)
2. People's Pult Plant (A.A. 2)
3. Rusty's Iron Foundry (A.A. 5)
4. Gestalt Malt Brewery (A.A. 27)
5. Caesar's Rendering Plant (A.A. 12)
6. Dusty Rhodes Cement Company (A.A. 23)
7. Schick Cannery (A.A. 3)
8. Municipal Incinerator (A.A. 10)
9. Humpty Dump (A.A. 15)
10. Flies Dump (A.A. 26)
11. Auto Assembly Abel (A.A. 4)
12. Auto Assembly Baker (A.A. 4)
13. Auto Assembly Charlie (A.A. 6)
14. Wolverine Forging Plant (A.A. 7)
15. Finch's Forging Plant (A.A. 6)
16. Smithy's Forging Plant (A.A. 2)
17. Ahead Forging Plant (A.A. 6)
18. Wordy Printing Company (A.A.6)
19. Bogus Printing Company (A.A. 6)
20. Boylan's Fertilizer (A.A. 2)
21. Peter's Water Heaters (A.A. 7)
22. Tar Heel Asphalt Paving (A.A. 8)
23. Concrete Batching (A.A. 12)
24. Spartan Galvanizing Company (A.A. 8)
25. Monkey Brass Melting Company (A.A. 5)
26. Trojan Varnish Manufacturing (A.A. 10)
27. Hannah Feed and Grain (A.A. 1)
28. LaRue Soap and Detergent (A.A. 1)
29. Acme Dry Cleaning (A.A. 4)
30 Trojan Dry Cleaning (A.A. 7)
31. Losten Foundry -- Iron (A.A. 5)
32. Dusty's Cement Products (A.A. 3)
33. Rembrants Rendering (A.A. 27)
34. Wiffenpoof Fertilizer (A.A. 1)
35. Saint Andre Asphalt Paving (A.A. 15)
36. Oriental Concrete Batching (A.A. 20)
37. Daily Journal Printing (A.A. 7)
38. Tiger Body Assembly (A.A. 3)
39. Academic Feed and Grain (A.A. 13)
40. Spotless Dry Cleaning (A.A. 11)


spring
summer
fall
winter
Township I
Township II
WARD 1
WARD 2
WARD 3
SUBURB
CENTRAL CITY
LEGEND
MAJOR INDUSTRIES
1 SHEAR POWER COMPANY (A.A. 8)
2 PEOPLE'S PULP PLANT (A.A. 2)
3 RUSTY'S IRON FOUNDRY (A.A. 5)
4 GESTALT MALT BREWERY (A.A. 27)
5 CAESAR'S RENDERING PLANT (A.A. 12)
6 DUSTY RHODES CEMENT COMPANY (A.A. 23)
7 SHUCK CANNERY (A.A. 3)
8 MUNICIPAL INCINERATOR (A.A. 20)
9 HUMPTY DUMP (A.A. 15)
10 FLIES DUMP (A.A. 26)
11 AUTO ASSEMBLY ABEL (A.A. 4)
12 AUTO ASSEMBLY BAKER (A.A. 4)
13 AUTO ASSEMBLY CHARLIE (A.A. 4)
14 WOLVERINE FORGING PLANT (A.A. 7)
15 FINCH'S FORGING PLANT (A.A. 6)
16 SMITHY'S FORGING PLANT (A.A. 3)
17 ARSAL FORGING PLANT (A.A. 6)
18 MORDY PRINTING COMPANY (A.A. 4)
19 BOGUS PRINTING COMPANY (A.A. 4)
20 BOYLAN'S FERTILIZER (A.A. 2)
21 PETER'S WATER HEATERS (A.A. 7)
22 TAR HEEL ASPHALT PAVING (A.A. 9)
23 CONCRETE BATCHING (A.A. 12)
24 SPARTAN GALVANIZING COMPANY (A.A. 8)
25 MONKEY BRASS MELTING COMPANY (A.A. 5)
26 TROJAN VARNISH MANUFACTURING (A.A. 10)
27 HANNAH FEED AND GRAIN (A.A. 13)
28 LARGE SOAP AND DETERGENT (A.A. 11)
29 ACME DRY CLEANING (A.A. 4)
30 TROJAN DRY CLEANING (A.A. 7)
31 LOSTEN FOUNDRY -- IRON (A.A. 5)
32 DUSTY'S CEMENT PRODUCTS (A.A. 3)
33 REMBRANT'S RENDERING (A.A. 27)
34 WIFFLEPROOF FERTILIZER (A.A. 1)
35 SAINT ANDRE ASPHALT PAVING (A.A. 15)
36 ORIENTAL CONCRETE BATCHING (A.A. 20)
37 DAILY JOURNAL PRINTING (A.A. 7)
38 TIGER BODY ASSEMBLY (A.A. 3)
39 ACADEMIC FEED AND GRAIN (A.A. 13)
40 SPOTLESS DRY CLEANING (A.A. 11)
AIR MONITORING SITES
MUNICIPAL FACILITIES
SEWAGE TREATMENT PLANTS (A.A. 2, 19)
WATER TREATMENT PLANTS (A.A. 8, 19)
HOSPITALS
1. QUALITY CARE HOSPITAL (A.A. 9)
2. ST. PETERS HOSPITAL (A.A. 1)
3. APEX COUNTY HOSPITAL (A.A. 7)
4. APEX GENERAL HOSPITAL (A.A. 10)
5. UNIVERSITY MEMORIAL HEALTH CENTER (A.A. 18)
APEX COUNTY

CHAPTER 2

Glossary and Reference Terms

Chapter 2

GLOSSARY AND REFERENCE TERMS

ABATEMENT

Abatement is the reduction of pollutant emissions from a source or sources.

AEROBIC

A process taking place in the presence of oxygen; or a state of liquid containing free dissolved oxygen.

AIR POLLUTION

Air pollution is the presence in the outdoor air of substances which, when present in a sufficient quantity or over a period of time, can cause an undesirable effect upon man, property, or the environment.

AIR POLLUTION REGULATIONS

Air pollution regulations are legal constraints on pollutant emissions, production processes, or control systems. State regulations and County regulations are enforceable by legal sanctions, while recommendations are not.

AIR QUALITY (See NATIONAL AMBIENT AIR QUALITY STANDARDS)

Air quality refers to the pollution concentration characteristics of the atmosphere or ambient air in a given area. It is usually stated in terms of the levels of concentration of specific pollutants, in micrograms of pollutant per cubic meter of air (Mgm/m3) (See CONCENTRATION).

Air Quality Goals are expressions of desirable maximum pollutant concentrations to be achieved through a pollution control program.

Air Quality Criteria - The basic medical and technical information which forms the rationalization from which Air Quality Standards are set. This information is published for each major pollutant by EPA in Air Quality Criteria Documents.

Air Quality Standards are quantitatively-specified maximum levels of pollutant concentrations or dosages, as more precise statements of air quality goals.

AIR QUALITY CONTROL REGION

One of the approximately 250 geographic areas covering the United States which form the basic units for air pollution control activities. These areas were designated by EPA (with the states) and are based on considerations of climate, meteorology, topography, urbanization and other factors affecting air quality.

ALERT STAGES

Alert Stages refer to critical levels of concentration or dosage signaling potential disastrous pollution effects and requiring emergency abatement and control measures.

ANAEROBIC

A process taking place in the absence of oxygen; or a state of liquid containing no free dissolved oxygen.

ANALYSIS AREA (A.A.)

Analysis areas are used as the primary areal reference units for the data and issues throughout the game. The County is divided into a number of analysis areas, each of which is the approximate size of several census tracts. The analysis areas included in the five jurisdictions are as follows:

Jurisdiction 1-- Central City: Ward 1 = AA 1 through AA 4
Ward 2 = AA 5 through AA 8
Ward 3 = AA 9 through AA 13

Jurisdiction 2-- Suburb: AA 17 through AA 19

Jurisdiction 3-- Township 1: AA 23 through AA 28

Jurisdiction 4-- Township 2: AA's 14-16, 20-22, 29

Jurisdiction 5-- County: AA's 1-29

See APEX Analysis Area Map

ANNUAL WAGE

This is the annual cost to the Industrialist of one worker and is an average of the various rates of pay applicable to the different types of workers in the firm. The applicable average wage rate for each firm is reported in the Industrialist's printout each cycle under cost factors. This wage rate may be subject to negotiations with the labor representative and this new negotiated wage rate will supercede the rate found under cost factors on his printout.

ASSESSED VALUE

Assessed value is the value assigned to real estate property for purposes of assessing taxes owed to each of the jurisdiction County and school districts. Governments are required by law to maintain an assessed value of 50% of market value for propert in their jurisdiction, although this requirement is often not met. (E.g. if a residential property is valued on the market at $20,000, its assessed value is $10,000.) (See STATE EQUALIZED VALUE.)

BACKGROUND LEVEL

The amount of pollutants due to natural sources such as marsh, gas, pollen, conifer hydrocarbons and dust.

BOARD OF DIRECTORS

Each Industrialist acts as a Plant Manager and is responsible to the Board of Directors of his plant for his decisions and actions. The Board has the ultimate decision-making power in plant affairs and may approve, amend or reject the manager's fiscal policy proposal. The Board also sets the amount of dividends to be paid to the stockholders.

BONDING

Bondin is the process of incurring public debt to finance some capital improvement project. It is a device used to extend the incidence of costs over a long period of time, rather than have costs met out of current revenues while the project is under construction. Politicians may issue two kinds of bond general obligation bonds and revenue bonds. These differ in three respects: (1) the need for voter concurrence, (2) how they are paid off, and (3) the kinds of projects for which they are appropriate. Before Politicians may float general obligatio bonds to finance projects, voters must approve this action in a referendum. There is a State-imposed limit on the indebtedne that a jurisdiction may incur through general obligation bonds. The amount of additional bonded indebtedness that can be sought is indicated in the Politician's output as "$ Limit on Next G.O Bond Sought". (See DEBT RETIREMENT for the process of financin general obligation bonds.)

Revenue bonds are not submitted to a referendum and are appropr iate only for particular projects. (Projects for which they may be used are noted in the Project List.) They are paid off thro fees collected for the service provided by the facility, rather than by taxes.

CAPITAL PLANT INDEX (C.P.I.)

The capital plant index is a ratio of the present dollar value of public capital facilities (sewers, water lines, streets, parks and miscellaneous public holdings) to population equivalents. This number reflects the load imposed on facilities by residents, employees and clients, and this is considered an indication of the relative level of adequacy of these facilites. Present dollar value is calculated each cycle on the basis of depreciated value of existing facilities plus new facilites. (Facilities depreciate at about 5% of original value per year.) (See POPULATION EQUIVALENT.)

CASH CARRYOVER

This is the cash reserve which an Industrialist or Developer carries over to the next cycle after making all his expenditure including those for capital plant. It represents uncommited funds, which the player is free to use in the next cycle.

CASH TRANSFER

A cash transfer is used for loans or gifts of cash between players when the reason for the exchange is unspecified. Revenues made, or expenditures incurred, through an exchange of cash between either the Government, Industrialist, or Developer, are recorded in the budget section of their printout. When applicable, cash transfers are also used to cover the cost of television time and newspaper articles.

CLEAN AIR ACT AMENDMENTS OF 1970

(See LEGAL REFERENCE MANUAL.)

COLLECTION/DISPOSAL STUDY

Studies of municipal house-to-house refuse collection using combinations of different truck types, crew sizes, container locations, transfer stations and disposal sites to determine the capital and operating costs of alternative systems.

COLLOIDAL PARTICLES

Very fine particles of material in fluid suspension; particles will not settle out and can pass through a semipermeable membra

COMBUSTION

Combustion is the process of burning.

CONCENTRATION

Concentration is the ratio of pollutants to effluent gases or ambient air, measured in micrograms per cubic meter (MG/cubic meter) as a weight to volume ratio. Data on mean concentration per quarter, concentration on worst day, and number of days above a specified concentration can be obtained by the APCO, through the installation and operation of monitoring stations.

CONTAMINANT

(See POLLUTANT)

CONTROL EFFICIENCY

Control efficiency refers to the ratio of the amount of a pollutant removed from effluent gases by a control device to the total amount of pollutant without control.

CONTROL STRATEGY

A comprehensive plan designed to control or reduce the level of a pollutant or pollutants in the environment.

CONTROL SYSTEM

Control system refers to equipment and/or procedures intended to reduce the amount of a pollutant, or pollutants, in effluent gases. Each gamed industrial firm has a limited set of control system options for each production process and combustion proces

DEBT RETIREMENT (Debt Service)

Debt retirement, or debt service, is a term used to describe the process of paying off long-term general obligation bonds sold by public agencies. Debt retirement is a budget category of the Politician which includes expenditures for both principal and interest on general obligation bonds. Financing of these expenditures may be with either normal millage or debt retirement millage.

DEMOLITION COSTS (Clearance Costs)

A demolition cost of 5% of the assessed value of developed PROPERTY must be paid when developed land is rezoned.

DENSITY

In residential areas, density is the term used to express the number of dwelling units per acre of land. In APEX County a different density is associated with each of the five residential

development types, with the lowest density found in land use category R-1 and the highest in category M-2.

The table on the following page expresses housing density in housing units per acre, and in acres per housing unit.

DEPRECIATION ALLOWANCE

Each cycle, the total value of industrial capital facilities, (building and equipment) depreciates at 8%. A tax credit of 5% of the capital value of these facilities is allowed the Industrialist to compensate for this depreciation. The amount is deducted before Federal and State income taxes are paid. The Industrialist may claim any part of his maximum allowance; any portion of the allowance not taken will accumulate. The maximum depreciation allowance is listed under cost factors in the Industrialist's printout.

DEVELOPMENT TYPES AND COSTS

A. Residential

In APEX County there are various levels of cost and density associated with different qualities and sizes of housing which may be built by Developers. These costs are for structures, exclusive of land and site improvements.

Single Family

Three different development-cost levels are applicable to APEX County single-family housing units, ranging from the highest construction cost of $40,000 (designated as R-1) to the lowest cost housing, built at $15,000 per unit (designated as R-3). Any one of these types may be built on land which, when vacant, is zoned R.

Multiple Family

Units of two different cost levels, M-1 and M-2 are available for construction of multi-family housing in APEX County. The highest cost per unit, for M-1, is $30,000 and the lowest, for M-2, is $12,000. Either of these types may be constructed on vacant land zoned M.

Residential Development Costs Per Unit

R-1	R-2	R-3	M-1	M-2
$40,000	$22,500	$15,000	$30,000	$12,000

HOUSING DENSITY

AA	R-1		R-2		R-3		M-1		M-2	
	Units Per Acre	Acres Per Unit	Units Per Acre	Acres Per Unit	Units Per Acre	Acres Per Unit	Units Per Acre	Acres Per Unit	Units Per Acre	Acres Per Unit
1	1.4	.714	3.5	.286	5.6	.179	11.2	.089	21.0	.048
2	2.4	.410	6.0	.167	9.6	.104	19.2	.052	36.0	.028
3	2.0	.500	5.0	.200	8.0	.125	16.0	.063	30.0	.033
4	2.8	.357	7.0	.143	11.2	.089	22.4	.045	42.0	.024
5	2.1	.476	5.25	.190	8.4	.119	16.8	.060	31.5	.032
6	1.6	.625	4.0	.250	6.4	.156	12.8	.078	24.0	.042
7	2.5	.400	6.25	.160	10.0	.100	20.0	.050	37.5	.027
8	3.0	.333	7.5	.133	12.0	.083	24.0	.042	45.0	.022
9	1.2	.833	3.0	.333	4.8	.208	9.6	.104	18.0	.056
10	2.5	.400	6.25	.160	10.0	.100	20.0	.050	37.5	.027
11	1.0	1.000	2.5	.400	4.0	.250	8.0	.125	15.0	.067
12	1.0	1.000	2.5	.400	4.0	.250	8.0	.125	15.0	.067
13	1.0	1.000	2.5	.400	4.0	.250	8.0	.125	15.0	.067
14	.5	2.000	1.25	.800	2.0	.500	4.0	.250	7.5	.133
15	.6	1.667	1.5	.667	2.4	.417	4.8	.208	9.0	.111
16	.8	1.250	2.0	.500	3.2	.313	6.4	.156	12.0	.083
17	1.2	.833	3.0	.333	4.8	.208	9.6	.104	18.0	.056
18	2.3	.435	5.75	.174	9.2	.109	18.4	.054	34.5	.029
19	3.0	.333	7.5	.133	12.0	.083	24.0	.042	45.0	.022
20	.8	1.250	2.0	.500	3.2	.313	6.4	.156	12.0	.083
21	.5	2.000	1.25	.800	2.0	.500	4.0	.250	7.5	.133
22	.4	2.500	1.0	1.000	1.6	.625	3.2	.313	6.0	.167
23	.7	1.429	1.75	.571	2.8	.357	5.6	.179	10.5	.095
24	.3	3.333	.75	1.333	1.2	.833	2.4	.417	4.5	.222
25	.4	2.500	1.0	1.000	1.6	.625	3.2	.313	6.0	.167
26	.3	3.333	.75	1.333	1.2	.833	2.4	.417	4.5	.222
27	.6	1.667	1.5	.667	2.4	.417	4.8	.208	9.0	.111
28	.3	3.333	.75	1.333	1.2	.833	2.4	.417	4.5	.222
29	.5	2.000	1.25	.800	2.0	.500	4.0	.250	7.5	.133

B. Commercial

Two types of commercial land use are allowable in APEX County. These relate to local neighborhood shopping facilities and to regionally-oriented commercial and service facilities. Both may be built only on zoning category "Commercial" land. Each is developed on a cost-per-acre basis, as follows:

Commercial Development Costs by Type

CL	CR
$100,000	$125,000

C. Industrial

Endogenous industrial development permitted Developers in APEX County is on a per-acre basis, the cost being $100,000 per acre. Zoning category I land may be developed into this land use.

(See ZONING CATEGORY.)

DOSAGE

The accumulated exposure of a person, plant, materials, etc., to a particular concentration of pollutant for a specified period of time.

DUMP

A site where uncontrolled disposal of solid waste occurs.

EFFLUENT

An effluent is a gaseous or liquid discharge or emission.

EFFLUENT SAMPLES

An effluent sample is an industrial outflow water sample and analysis which provides data on seven water pollutant parameters. A sample may be ordered by the Water Quality Manager and is taken at the source specified by the WQM.

ELITE OPINION POLL (E.O.P.)

The Elite Opinion Poll calls for a vote of all game players on certain major policy issues in the community. These issues appear as headlines in the METRO-APEX NEWS, which ask for either a deciding or advisory vote. The results of the Poll affect public officials' chances of reelection, as well as the probability of passage of general referenda, specific bond issues and special millage requests.

EMERGENCY EPISODE

An air pollution incident in which high concentration of pollutant(s) occur in the ambient air contributing to a significant increase in illness or death.

EMISSIONS

Emissions are pollutants in effluent or exhaust gases which are released into the air.

EMISSION FACTORS

Emission factors are estimates which can be used to approximate the rate of emissions of specific pollutants from generalized sources.

EMISSION INVENTORY

A compilation of the rate of pollution emissions in a given area by source type.

EMISSION MEASUREMENT

Air pollution emissions are measured in pounds per hour for particulates, sulfur dioxide (SO2), carbon monoxide (CO), nitrogen oxides (NOx), and hydrocarbons (HC); in Ringelmann number for smoke; and in Stinkelmann number for odor. The emissions measured are of specific pollutants from specific sources.

EMISSION RATE

Emission rate refers to the amount of pollutant emitted per unit of time or throughput. Maximum allowable emissions will be specified in pounds per hour (or pounds per 1000 pounds of process rate) if they refer to emission rates.

EMISSIONS SOURCE

An emission source is the origin of some specific air pollutants. In the game there are several gamed point sources, about thirty non-gamed point sources, plus motor vehicles and space heating as line and area sources, respectively.

ENVIRONMENTAL IMPACT STATEMENT

The results of a study which identifies and evaluates the adverse or beneficial environmental effects of pursuing a proposed action, pursuing an alternative action or not pursuing the proposed action.

EXOFIRM (EXOGENOUS FIRM)

An Exofirm is an industry or bureaucratic firm that depends primarily upon markets outside the local area for its growth and vitality. These firms are usually classified as Exofirms on the basis of their being net importers of dollars and net exporters of products or services to these outside markets. Jobs created by Exofirm growth spur additional growth of households and jobs oriented to the local market. (Exofirms are also often referred to as basic firms).
In APEX County, Exofirms locate in industrial and office zoning categories. Periodically, the newspaper will note the opportunity for Developers or Industrialists to invest, in a speculative way, in the entry of new Exofirms into the metropolitan area, with a variable probability of success attached to such investments. Occasionally, these Exofirms require rezoning of land and/or installation of special capital improvements. Requirements for such special public action and requests for private investment will be noted in the newspaper announcement of the firm's interest in locating in the area.

FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

(See LEGAL REFERENCE MANUAL)

FUEL RATE

The amount of fuel consumed by each industry per unit of time is specified in tons/hours for coal, in barrels (bbl)/hour for oil, in thousand cubic feed (MCF)/hour for natural gas, and in megawatts (MW) for electricity.

FUEL TYPE

The fuel types for industry include: low-grade coal (Lo-Coal), high-grade coal (Hi-Coal), low grade oil (Lo-Oil), high-grade oil (Hi-Oil), natural gas, and electricity. The fuel option for each plant is listed in the Industrialist's printout. The fuel grade refers inversely to the air pollution potential of the burining fuel, i.e., Lo-Grade has higher pollution potential, and Hi-Grade fuels have low pollution potential.

GARBAGE

The food waste portion of solid waste.

HAZARDOUS AIR POLLUTANTS

Air pollutants not covered by the Air Quality Standards but which, in EPA's judgement, "may cause, or contribute to, an increase in mortality or --- serious illness." These pollutants generally are toxic substances such as mercury, cadmium, asbestos and beryllium.

HAZARDOUS WASTE

(See "SOLID WASTE TYPE")

HOUSEHOLD/COMMERCIAL REFUSE

(See "SOLID WASTE TYPE")

HOUSEHOLD TYPES

The five household types used in APEX County are characterizations of families belonging to fairly homogeneous socio-economic groups. These characterizations reflect life style, political involvement and voting habits, general consumption behavior and preference for public goods. There is substantial overlap of income levels for all status groupings; hence income, alone, is a weak indicator for characterizing households.

Household Type 1 -- is upper class and upper-middle class combined. Occupations of the heads of households are: professionals, technical workers, managers, officials, and proprietors. One-half of the family income levels are in excess of $15,000 and the other half are in the $10,000-$15,000 range. Value of housing is in excess of $20,000, and if they rent, rentals are over $150 per month. This is the group which is most concentrated in residential locations. Education of the head of the household is at least college graduate, often with post-graduate study. Interest group membership for this household type is found in the Business Community and Effective Government Groups.

Household Type II -- is the typical middle-class household in which the head of households occupation is clerical, sales, or kindred types. Income of the family is primarily in the $7,000-$10,000 range. Education of the head of the household is some college or at least high school graduation.

Housing value is primarily in the $15,000-$25,000 range, and gross rentals would usually be from $100 to $149 per month, though they may be somewhat lower. Interest group affiliations for this type are with the Effective Government Groups on the one hand, and with the Right-wing Conservatives on the other.

Household Type III -- the most numerous and widely-distributed of the five types is characterized by a mixed membership of very low income white collar workers, skilled craftsmen, and foremen, though the latter two predominate. In the outlying areas, farmers fall into this category. Family income is primarily in the $5,000-$9,000 range. The head of the household's education is typically high school graduation. Housing value is usually in the $12,000-$20,000 range and rentals are from $80-$125 per month. Members of this group are apt to belong to the Labor Vote and/or the Right-wing Conservative interest groups.

Household Type IV -- is composed of semi-skilled workers, industry operatives and non-household service workers, such as waiters, barbers and parking-lot attendants. Family income is in the lower portion of the $4,000-$7,000 range. Housing values range from $10,000 to $14,000 with gross rentals being $70 to $90 per month. Education of the head of the household is usually 9 to 11 years. Interest group membership for this household type is found in the Labor Vote and among the Civil Rights Groups.

Household Type V -- is the lowest stratum of society, and heads of households are laborers or household service workers. The vast majority of the area's unemployment are of this type and roughly half of all members are elderly and retired. Family income is less than $5,000 annually and the value of housing is less than $10,000, with rentals primarily $50-$75 per month. Heads of households have usually not been educated beyond the eigth grade. Membership in interest groups is found in the Labor Vote and Civil Rights Groups.

Political involvement of the five household types declines from Type I (the highest) to Type V, the latter being generally apathetic. Likewise, concern with government operation and provision of public services is highest in Type I households and declines steadily through Type V families.

The five household types will tend to demand housing of the five residential development types according to the following percentages:

Household Type I -- 50% will choose R-1; 30% R-2 and 20% M-1

Household Type II -- 20% will choose housing in each of the five development types

Household Type III -- 10% prefer R-1; 30% prefer R-2; 20% choose R-3; 25% take M-1, and 15% M-2

Household Type IV -- 20% will choose R-2; 40% R-3; 10% M-1, and 30% M-2

Household Type V -- 40% will be in R-3; 60% in M-2

IMPLEMENTATION PLAN

Under the 1970 Clean Air Act, each state must prepare and have approved by EPA an Implementation Plan which details the methods, strategies and timetable which the state and its jurisdictions will employ to meet and maintain the Air Quality Standards within the control region(s) within its jurisdiction.

IMPROVEMENT COSTS

Improvement costs are fees to prepare raw land for development, including subdivision costs, sewer and water connections, drainage and engineering. Developers are required to pay improvement costs on all land on which they build structures. For residential property, improvement costs are on a per unit basis as follows:

R-1	R-2	R-3	M-1	M-2
$1,000	$300	$700	$600	$400

For commercial and local industrial land uses, improvement costs are on a per acre basis; for each the fee is $5,000 per acre.

These fees are automatically applied to all land on which the Developer builds.

INTEREST GROUPS

In APEX County there are 5 major political interest groups that take stands on public policy issues and have a significant impact upon voting behavior. The more extreme the position assumed by one of these interest groups (as indicated on a scale of +4 to -4), the greater will be the voter turnout surrounding any particular referenda or election. Each of these interest groups derive their constituency from among two or more of the "Household Types" (See HOUSEHOLD TYPES)

1. CIVIL RIGHTS GROUPS: The orientation of these groups is primarily towards issues such as fair employment, neighborhood improvement, and problems that affect minorities. Their leadership is drawn from the elite liberals or the ghetto activists, their membership from the lower social strata. Their mode of operation is typically public protest and demonstrations centered around a very specific policy issue or community problem, and their influence on the system as a whole is moderate.

2. EFFECTIVE GOVERNMENT GROUPS: Are overwhelmingly middle class, composed primarily of professional people, a large percentage of them women. These groups are interested in a wide range of issues, on which they exert moderate influence. their orientation is towards governmental efficiency and towards community growth and image.

3. BUSINESS COMMUNITY: Draws from the whole range of commercial and mercantile interests, as well as some from the professional areas such as law, engineering and medicine. The business community exerts the highest degree of power of all politically oriented interest groups; their interest is directed primarily at community image, growth, and "BOOSTERISM".

4. LABOR VOTE: Are more conservative locally than nationally and exhibit some divergency between craft unions and industrial unions, the former being more conservative. The labor vote exert moderate influence on a range of issues somewhat less broad than those of interest to the "Effective Government Groups". The conservatism of the labor vote is especially apparent in the opposition of some of its constituency to public spending for social welfare.

5. RIGHT-WING CONSERVATIVES: Draws its membership primarily from people who resist change and advocate conserving the "traditions of Americanism--God and Country." They are generally against social change, increases in government influence in local affairs and public spending on social programs. Since these groups do not advocate change, they usually only become actively involved in public issues as a reaction to public programs proposed by other groups.

INTEREST RATE

The cost of borrowing money will vary for the Industrialists and Developers according to both their credit rating and the length of the loan, i.e., how many years will be taken to repay it. The maximum number of years on any loan by an Industrialist or Developer is 20 years. Applicable interest rates as follows:

Years to Repay	Credit Rating A-1	A-2	A-3
1-2	4%	6%	8%
3-5	6%	8%	12%
6-10	8%	12%	16%
11-20	12%	16%	20%

The cost of borrowing money for governmental agencies, the interest rate on bonds, will vary according to the credit rating of the jurisdiction, and will differ between general obligation and revenue bonds. Since revenue bonds are not backed by governmental taxing power they are riskier and therefore carry higher interest rates than general obligation bonds. As a jurisdiction's credit rating falls from A-1 to A-3, the interest rate on general obligation bonds will increase from 4.5% to 6%.

INVERSION

A layer of air trapped near the ground by a layer of warmer air above it.

ISSUE

Issue is used to refer to a problem situation presented to players in the METRO-APEX NEWS. Following each issue are two to four alternatives one of which must be selected by the player.

(See ELITE OPINION POLL)

JURISDICTION

Jurisdiction refers to one of the political units in APEX County. Abbreviations used in the game are:

(Jurisdiction 1) CC - Central City
(Jurisdiction 2) SUB - Suburb
(Jurisdiction 3) TW 1 - Township 1
(Jurisdiction 4) TW 2 - Township 2
(Jurisdiction 5) Co - County

(See ANALYSIS AREA.)

LAND USE

Land use is a term used to refer to the spatial distribution of City and rural functions--its residential communities or living areas, its industrial, commercial and retail business districts or major work areas and its agricultural, institutional and leisure time functions.

(See DEVELOPMENT TYPE and ZONING CATEGORY.)

LEACHATE

Water moving vertically through the soil of a landfill that may become contaminated from the waste material in the fill.

MAXIMUM PRODUCTION CAPACITY

This is the maximum number of units which can be produced by a gamed industry in a cycle, with the plant and equipment in existence during that cycle. Maximum capacity may be increased by making capital expenditures for building and equipment. New productive capacity becomes available only in the cycle following that in which money is budgeted for plant expansion.

MEAN PROBABLE NUMBER PER 100 ml (MPN/100 ml)

A measure of the amount of coliform organisms per unit volume. By using quantities of sample varying in geometric series i.e., 0.01, 0.1, 1.0 milliliters, and by applying the usual test for coliform organisms, it is possible to determine a statistical estimate or "most probable number" of coliform organisms per 100 ml of water.

MICROGRAMS PER CUBIC METER

The weight of a substance in 1/1,000,000 of a gram contained in one cubic meter of volume.

MILLAGE

Millage is the tax rate, in mills, which is applied to State equalized property value to generate property tax revenue. One mill is equal to a $1 charge on each $1000 of value, or one tenth of one percent of the State equalized value. There are three types of millage:

A. Normal Operating Millage is determined by local Politicians and is applied to standard operating costs of government by State and local law -- the local limit can never be higher than the limit set by the State.

B. Special Millage, which is not subject to State and local limits, can be used for financing special programs. It must be voted and passed on in a referendum.

C. Debt Retirement Millage is not subject to the State and local limits but it can be used for retiring general obligation bonds. This millage requires a favorable vote in a referendum.

Total millage is the sum of operating millage, any special millages and the debt retirement millages which may be in effect during the year.

MILLIGRAMS PER LITER (mg/l)

Weight per unit volume. For water effluents, milligrams per liter is used to express the concentration in terms of the weight in milligrams of a dissolved or suspended pollutant in one liter of water.

MONITORING STATION

A monitoring station is a facility that houses air quality monitoring equipment for measurement of ambient air quality. One air quality monitoring station may be installed and operated in any analysis area. The pollutants measured at each monitoring station are:

Particulates, SO2, CO, NOx, and Hydrocarbons

Each pollutant is measured by a different type of monitoring equipment.

(See AIR QUALITY)

NATIONAL AMBIENT AIR QUALITY STANDARDS

EPA has set Primary and Secondary Air Quality Standards which are the maximum concentration of air pollutants allowable by federal law. Primary Standards are based on protection of the public health and are to be achieved as a first priority. Secondary Standards are based on the public welfare and will be achieved as a second priority.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

(See LEGAL REFERENCE MANUAL)

OFF GASSES

Gasses arising from landfills or other solid waste conversion (such as thermal) operations and leaving the site of generation.

PLANNED UNIT DEVELOPMENT

A planned unit development is an allocation of density to a development site such that the overall density meets the zoning requirements, but within the site certain areas may be of a higher concentration than those other developments around this site. This allows the Developer more flexibility in designing planned neighborhoods.

(See DENSITY)

PLANT INSPECTION

A plant inspection is an "on-site" examination of production and pollution control equipment, processes and procedures. Plant inspections ordered by the APCO will provide him with information on the production processes; production capacity; fuel and process rates; control systems; smoke code (Ringelmann number); and odor code (Stinkelmann number) for each process of a specific gamed or non-gamed emission source.

PLANT MANAGER

The player in the role of Industrialist is acting as a Plant Manager.

(See BOARD OF DIRECTORS.)

POLLUTANTS

Air Pollution:

(1) Particulates: particulate matter is any material (except uncombined water) which exists in a finely divided form as a liquid or solid at standard conditions.

(2) Sulfur Dioxide (SO_2) is a pungent colorless gas which is commonly emitted from the combustion of sulfur containing compounds, especially fuels such as coal and fuel oil. Sulfur dioxide can also be emitted from chemical process plants, metal process plants and trash burning incinerators.

(3) Carbon Monoxide (CO) is a colorless, odorless, very toxic gaseous product of the incomplete combustion of common fuels. It can also be generated by metabolic processes and the partial oxidation of carbon-containing compounds such as limestone. Carbon monoxide adversely affects human respiration by interferring with the body's ability to assimilate oxygen.

(4) Oxides of Nitrogen (NOx) are formed when oxygen and nitrogen are heated to a high temperature. Sufficiently high temperatures to produce significant amounts of NOx are normally only reached in modern efficient combustion processes such as electric power plants and automobile engines. Oxides of nitrogen in combination with hydrocarbons and sunlight are major constituents of photochemical smog.

(5) Hydrocarbons (HC) are compounds containing combinations of hydrogen and carbon. Gaseous hydrocarbon air pollutants are most commonly emitted from the incomplete combusion of fuels such as gasoline, coal, oil and gas from the production, handling and evaporation of gasoline, paint thinners, solvents, etc. Hydrocarbons along with oxides of nitrogen and sunlight are important in the generation of photochemical smog.

Water Pollution:

(1) Biological Oxygen Demand - B.O.D. is the amount of oxygen needed by any polluted water or sewage to allow micro-organizms to consume the suspended and dissolved biodegradable organic material found in the liquid under aerobic conditions.

(2) Coliform Bacteria - Micro-organisms found in sewage serving as the indicator of bacterial contamination in water quality.

(3) Dissolved Oxygen (D.O.) is the amount of oxygen found and available for biochemical activity with a given volume of water (mg./l.). The saturation point is dependent upon temperature, chemical characteristics of the water, and barometric pressure.

(4) Nutrients - Nutrients are phospates, nitrates, nitrogen and phosphorus released as waste from certain industries or produced from agricultural and urban runoff.

(5) Thermal Pollution - The increase in temperature of surface waters as a result of the use of these

waters for cooling purposes by industry or public facilities. The heat accelerates biological processes in the stream, resulting in reduction of oxygen content of the water.

(6) Total Dissolved Solids (T.D.S.) - The amount of solids, dissolved in a given volume of water (mg./l).

POPULATION EQUIVALENT

The population equivalent is a means of converting (a) residents, and (b) employees and clients of industries and commercial facilities into a standard measure of the demand placed on such public capital facilities as sewers, streets, and water supply. The population equivalent of an area (analysis area or jurisdiction) is computed as follows:

P.E.= [Total households]+[.3 x all employees of commerce and industry]

For use of population equivalents in APEX County, see CAPITAL PLANT INDEX.

PROCESS RATE

Process rate refers to the amount of materials processed by an Industrialist per unit time. The measure is specified in tons, pounds, barrels, per minute, per hour, etc.

PRODUCTION LEVEL

This is probably the key item determined by an Industrialist each cycle. It is the number of units of a product his plant will produce in that cycle. The Industrialist is free to set his production at any level he chooses, as long as the figure he sets does not exceed his maximum production capacity.

PRODUCTION PROCESS

A production process is a definable part of the overall production system of a given firm. Each gamed industrial firm may have up to five production processes, while each non-gamed industrial firm is assumed to have only one process.

PROMPT SCRAP

Wastes that are recycled for direct reuse without entering the solid waste stream.

QUASI-PUBLIC LAND

This is land owned by tax-exempt organizations such as churches and fraternal organizations. Such land includes church buildings and schools, cemeteries and such miscellaneous buildings as Elks lodges, etc.

REACH

A reach is a generally homogeneous segment of a river or stream. Often in water quality management typical measurements of water quality from any point in the reach are used as representative of the entire reach.

REFERENDUM

A referendum is a vote of the (simulated) population of a jurisdiction on some issue presented to the people by the Politician. Most usually referenda are called to approve (or reject) a general obligation bond issue or a request for special millage, although they may be called to approve some legislative matter, such as open housing.

REFUSE

A term applied broadly to mixed solid waste including food waste, trash, street sweepings, and non-toxic solid industrial wastes.

REZONING APPLICATION FEE

The rezoning application fee is a charge of $100, which is assessed for each rezoning request submitted by a Developer or Industrialist. It is included in that player's financial statement for the next cycle.

RINGELMANN NUMBER

The Ringelmann Number is a scale for measuring the blackness of smoke fumes and is equivalent to the opacity. Ringelmann Numbers and opacities are used for specifying allowable smoke emissions (Ringelmann for black and opacity for other colors). #0 = zero opacity #1 = 20%, #2 = 40%, #3 = 60%, #4 = 80%, #5 = 100%. In APEX County, all smoke readings are reported as Ringelmann Numbers.

SALVAGE

The recovery for reuse of any valuable component from the solid waste stream.

SANITARY LANDFILL

An operation where solid waste is deposited in the ground in a controlled manner. The waste is compacted when delivered and covered daily. APEX County can have three classes of sanitary land fills. (See below.)

SANITARY LANDFILL--Class I

A site where disposal of toxic or hazardous industrial waste (solid waste type 1) is permitted due to the geology and soil characteristics. Solid waste type 2 and 3 may be deposited in this class site.

SANITARY LANDFILL--Class II

A site where only non-toxic or non-hazardous waste may be deposited. These sites receive primarily mixed municipal refuse (solid waste type 2). Solid waste type 3 may also be deposited in this class site.

SANITARY LANDFILL--Class III

A site where only solid fill (solid waste type 3) may be deposited.

SEWAGE TREATMENT LEVELS

Primary Treatment - A series of mechanical treatment processes including screening and sedimentation, which removes most of the floations and suspended solids found in sewage, but which have a limited effect on colloidal and dissolved material.

Secondary Treatment - A series of biochemical, chemical, and/or mechanical processes which remove, oxidize or stabilize nonsetteable, colloidal, and dissolved organic matter following primary treatment.

Tertiary Treatment - Any sewage treatment process that has the capability to remove over ninty-nine percent of the pollutants in sewage if it follows secondary treatment.

SOIL PERMEABILITY

A measurement of the water porosity of soil; soil porosity measured in gallons per day of water which will be absorbed by one square foot of soil surface.

SOIL SURVEY

An engineering/geological survey of an analysis area which provides data on the water table level, soil type, and soil permeability. These parameters are important criteria to determine the suitability of an A.A. for Class I, II, or III sanitary land fills.

SOIL TYPE

Three predominent soil types are found in APEX County--clay, sand or gravel.

SOLID WASTE

Any waste that can be handled as a solid rather than a liquid.

SOLID WASTE DISPOSAL

The end point of solid waste handling; may include open dumps, sanitary land fills, incinerators, composting, hauling out of APEX County by contract, salvage and recycle, etc.

SOLID WASTE SOURCES

Solid wastes are generated from various sources as --

Household - Solid wastes from residences.

Commercial - Solid wastes derived from non-industrial commercial operation.

Industrial - Wastes produced as a result of manufacturing or related industrial operation.

Municipal - Mixed Household and Commercial waste that may contain some street cleaning wastes and industrial solid wastes.

Agricultural - Wastes derived from basic crop or animal operation including waste vegetables, minerals and animal manure.

SOLID WASTE TYPE

APEX County solid wastes are specified as one of three following types--

S.W. Type 1 - Hazardous Wastes; includes sewage sludge, pesticides, industrial chemicals, etc., (Only small quantities of high toxic wastes and radioactive wastes are generated in APEX County and these are not included in Type 1 wastes.)

S.W. Type 2 - Household/Commercial Refuse; includes trash, rubbish, garbage and decomposable organic refuse from commercial and household operations picked up by regular route collection.

S.W. Type 3 - Solid Fill; includes bulky non-water soluable, non-decomposable inert solids from municipal and industrial operations, demolition, etc. Examples are earth, rock, gravel, concrete, asphalt paving fragments, clay, glass, and rubber products.

Industrial wastes are distributed among the above three categories depending upon the characteristics of the particular waste.

SOURCE TYPES (AIR POLLUTION)

Point Source - A stationary source of pollution which has the potential of emitting a substantial amount of pollutant(s) such as a factory or power plant.

Line Source - A moving source of pollutants such as automobiles, buses, trains, and aircraft.

Area Sources - The sum of numerous widespread small stationary pollution sources as the space heaters in buildings.

Indirect or Complex Source - Stationary facilities or developments which indirectly generate substantial pollution by means of activity associated with them (such as vehicle traffic generated by shopping centers, sports complexes, airports, etc.)

STANDARDS OF PERFORMANCE

Direct limitations of pollutant emissions from certain types of high pollution sources (power plants, etc.) set by EPA and/or the states.

STATE EQUALIZED VALUE

State equalization is a process designed to even out differences in assessment practices among political jurisdictions. The state equalization factor applied to each jurisdiction's assessed value may thus be different. The state equalized value for a jurisdiction, reached by applying the factor to local assessed value, is the base on which millage is levied to generate property tax revenues.

STINKELMANN NUMBER

The Stinkelmann Number is a scale (developed in APEX County) for measuring odor emissions, and for specifying maximum allowable odor emissions. Numbers range from 0-5, covering least to worst odor levels, respectively.

TAX RATE

See MILLAGE

TRANSFER STATION

Site at which wastes are transferred from small compacter vehicles to larger long distance transport vehicles.

TRASH

The non-food, non-putrescible fraction of solid waste.

UNIT COSTS

The costs to the Industrialist of operating his plant are calculated, for each production component, except labor, on the basis of the amount and cost of each component required to produce one unit of the product. These unit costs apply to fuel, administrative overhead, inventory, and raw materials.

Fuel Cost applies to the fuel required to produce each Industrialist's product and will be different for each fuel type.

General Administrative Costs include all overhead expenditures, other than salaries, involved in production.

Inventory Carrying Costs must be paid to store product inventory from one cycle to the next. This cost excludes taxes on inventory.

Materials Costs include all raw materials required to produce the product, except fuel.

The unit costs for each of these components which are applicable for a particular Industrialist for the next year are included in that player's output.

UNIT SALES PRICE

This is the price, which an Industrialist sets each cycle, at which he will sell a unit of his product. Each Industrialist except the power plant has complete control over price; although the number of units he actually sells

will be dependent on the relationship of his price to supply-demand conditions in the general market, and to the current average industry-wide price (reported for the last three years in the Industrialist's output).

WATER QUALITY SAMPLES

A water quality sample is a water sample and analysis providing data on seven water pollutant parameters. The water quality manager may order water samples and designate the location from which they are to be taken.

WATER TABLE LEVEL

The distance from the surface of the ground to the underlying ground water level.

ZONING CATEGORY

Zoning categories apply only to vacant land for APEX County. Each of the six zoning categories may be developed into one or more types of land use:

FROM	TO
Zoning Category	Developed Land use Type(s)
(1) R - Single-family residential	(1) R-1 (low density, high cost) (2) R-2 (med. density, med. cost) (3) R-3 (high density, low cost)
(2) M - Multiple-family residential	(4) M-1 (low density, high cost) (5) M-2 (med. density, low cost)
(3) C - Commercial	(6) CL (Commercial-Local) (7) CR (Commercial-Regional)
(4) I - Industrial	(8) IL (Local industry) (9) IX (Exogenous industry)
(5) O - Office	(10) O (Exogenous office)
(6) A - Agricultural	(11) A (Active farming)

CHAPTER 3

Role Description

Chapter 3

POLITICIAN'S ROLE DESCRIPTION

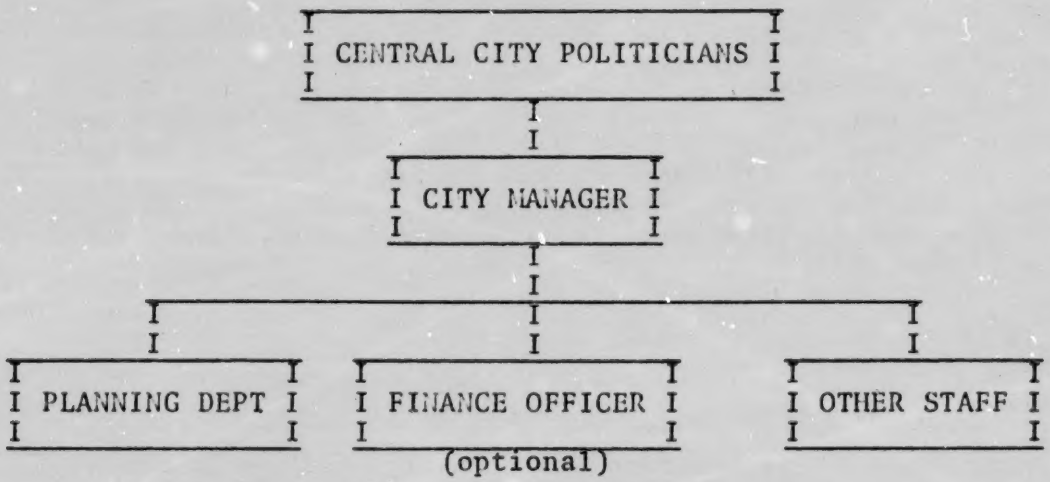
The role of the Politician in APEX is highly representative of the functions of the City Council and County Board of Supervisors in the real world. Accordingly, the individual Politician is normally concerned with the "general welfare" of his particular constituency. He therefore tries to provide the policy-making leadership necessary to promote responsive and effective local government. The desire of the Politician to be re-elected, however, usually has a strong influence on his responses to constituency needs and demands and on the policy positions assumed.

Delegation of Powers. APEX is divided into two main governing bodies, the Central City Politicians and the County Board of Supervisors. Normally there are three Central City Politicians. Each City Politician represents one of the three wards in the Central City. On the County Board there are five Board members. They represent the following: the Suburb, Township-1, Township-2, County Politician at Large, and Central City representative on the County Board. While there is a possibility of eight Politicians discussed, here, the Game Overall Director can delegate more or less people in each role.

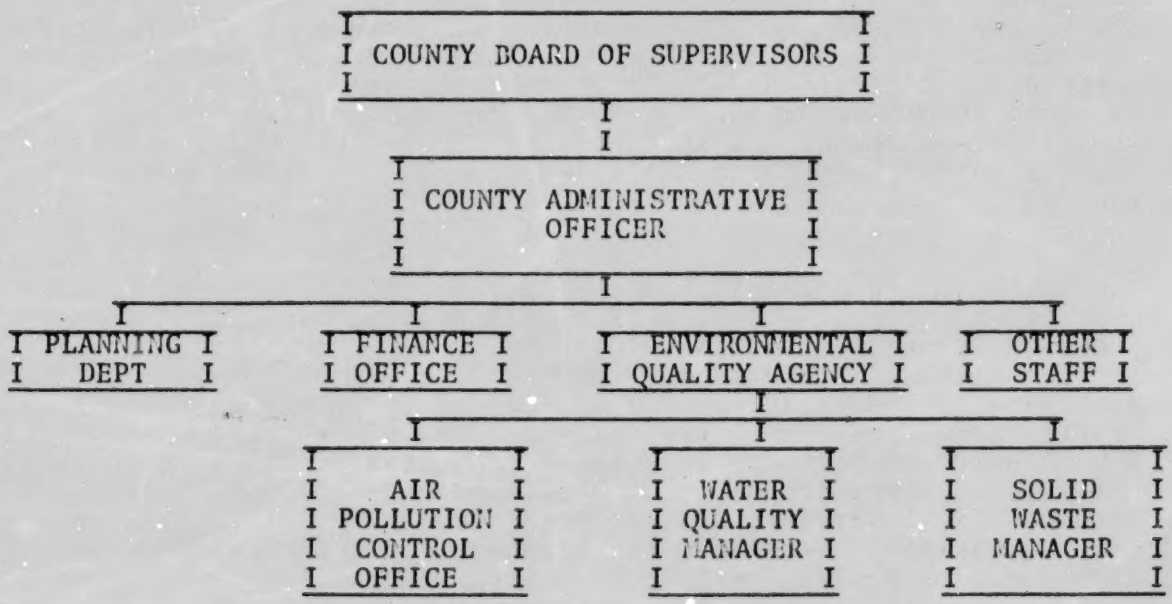
The role of the Politician is perhaps the most powerful one in the game. He determines the direction and welfare of the City and County and insures the smooth running of government. His most scarce resource is not necessarily money; rather, it may well be time to analyze and collect data, to meet with the steady stream of people who come to him in an attempt to affect his decision, to solicit his support or to demand his services. The Politician must bear in mind that, should he intend to seek re-election, the campaign trail begins the day he takes office. Support is obtained by the public image he projects.

In order to accomplish the objectives of his office, a Politician must often delegate power, solicit and organize support and above all, judiciously manage all his resources...time, money and manpower. The Central City Politicians have, as staff, a Planning Department, and at times, a City Manager. The latter can be extremely valuable in meeting and dealing with the daily routine of City administration. The Planners have access to much of the vital information on each analysis area required to make decisions and formulate policy. Although civil servants are protected by the "Civil Service Act" from unjustified dismissal, the Planners are not civil servants. Therefore, they serve as part of the Politician's staff and serve at his discretion.

In firing any member of his staff, a Politician must find a replacement if needed, and the Game Overall Director will place the person who has been fired into another role.



The County Politicians have the same power as the City Politicians over their staff. They have the right to fire any member who is not doing his job in a manner consistent with the policies established by the elected officials.



In formulating policy and making decisions, the Politicians may wish to make use of information from the Planner and to otherwise take advantage of his services. For example, the Planners output contains specific information on each analysis area, including per capita assessed valuation, capital plant indices, population changes, and other social indicators. In addition, the Politicians may ask the Planners for their informal views on certain matters and ask them to prepare special reports. Soliciting the assistance of community organizations such as Pressure Groups can have a big payoff, both in terms of facilitating the definition of the problems to be faced, as well as in establishing links with key elements in the community--something extremely valuable at re-election time. Public support or opposition to any specific issue may be found in the News Media, and the Elite Opinion Poll. Informal discussions with other roles such as Industrialists, Land Developers, even other Politicians, can prove invaluable to the formulation and implementation of sound public policy.

In those games where the Politicians have the assistance of a County Administrative Officer or City Manager, the CAO/CM operates at the direction of the Politicians. The job of the CAO/CM often includes the development of a preliminary budget, advising the Politicians on financial matters and presenting the annual budget for the County Board of Supervisor/City Council.

The County Politicians, acting in their capacity as the Environmental Quality Control Board are ultimately responsible for the total environmental quality in APEX County, including the Central City. The head of the Environmental Quality Agency is in turn directly responsible to the County Board of Supervisors for the activities of his agency. The E.Q.A. is composed of the Air Pollution Control Office, the Water Quality Management Office, and the Solid Waste Management Office, as specified in the State enabling legislation. (See Legal Reference Manual)

The County Politicians are charged with the legislative and financial matters of the E.Q.A. This includes: a) determination or amending of local rules and regulations; b) approving, disapproving or amending the annual budget requests of the departments; and c) renewing proposals for obtaining federal or state grants.

In general, when prescribing the maximum allowable emission levels for various pollutants, through the passage of County rules and regulations, the Politician may seek to balance the interests of several major community groups. Particularly in the cases of air and water quality, a balance must be achieved between the interests of the Industrialists and Land Developers. On one hand the Industrialists and Land Developers influence the social and financial climate of the community, most notably the levels of unemployment and property tax base.

While the Central City Politician is not directly responsible for environmental quality control, his constituents are nevertheless affected by environmental degradation. For this reason, the Central City Politician may seek to influence the policy decisions of the Environmental Quality Agency. He may do so either by working formally with the Agency or through political means of dealing with his representative on the Board of Supervisors.

Budgets. The Politician has several aids available which may guide and assist him in his actions. As a decision maker in the allocation of scarce resources he must be continually defining and prioritizing the needs and problems of the jurisdiction from which he was elected. The METRO-APEX NEWS will direct his attention to important issues and capital improvement needs in his jurisdiction; it will also give him information on the economic conditions at the national, state and local levels.

At the beginning of each cycle, the Politicians, both City and County, receive computer printout which provides the players with two sets of information: (a) a record of decisions made in the previous cycle, and (b) financial and other information which may guide the player in making current decisions. Since much of the Politicians' activity concerns the formulation of an annual budget, his printout consists largely of financial information.

The Politicians have two budgets and one fund that they must be concerned with each cycle: the Operating Budget; the Capital Budget; and the Debt Retirement Fund. These three items are separate and independent by State law.

1. The Operating Budget concerns general governmental and administrative expenses and basic community services such as police and fire protection, parks and recreation maintenance, library, etc. Expenditures under this budget do not involve the outlay of funds for capital improvements. Actual per capita expenditures for particular governmental services are printed as part of the budget and may be compared to a "standard" per capita expenditure which is based on a national average. This comparison can serve as a guide to the Politician's Operating Budget decisions.

COUNTY POLITICIAN'S MONIES FLOW

Revenues and Transfers In

II. Operating Budget
1. Surplus or Deficit from previous cycle
2. Property Taxes
   - Normal
   - Special
3. Licenses and Permits
4. Services
5. Other
6. Special Grants
7. Solid Waste Fees
8. Cash Transfers In
9. Land Sales
10. Road Commission Revenue

Expenditures

11. Operating Expenditures Categories A-M
   - A. Legislative and Administrative
   - B. Judicial
   - C. Public Safety
   - D. Parks Authority
   - E. Public Works Maintenance
   - F. Public Health
   - G. EQA Budget
   - H. Refuse Collection
   - I. Road and Street Maintenance
   - J. Employee Benefits
   - K. Public Relations
   - L. Library
   - M. Welfare and Hospitalization

12. Special Programs (new and continuing)
13. Transfers to Capital Budget
14. Transfers to Debt Retirement Fund
15. Cash Transfers Out
16. Transfer to Roads Fund

III. Capital Budget
1. Surplus or Deficit from previous cycle
2. Special Grants
3. Revenue Bond Sales
4. Capital Roads Fund (from above)
5. Transfers from Operating Budget
6. General Obligation Bond Sales

7. Continuing Capital Projects
8. New Capital Improvement Projects
9. Land Purchases

IV. Debt Retirement Fund
1. Surplus or Deficit from previous cycle
2. Transfers from Operating Budget
3. Special Debt Retirement Millage

4. Annual General Obligation Bond Payments

CENTRAL CITY POLITICIAN'S MONIES FLOW

Revenues and Transfers In

II. Operating Budget
1. Surplus or Deficit from previous cycl
2. Property Taxes
   Normal
   Special
3. Other Agencies (State, Federal)
4. License Fees and Fines
5. Other non-property tax revenue
6. Special Grants
7. Solid Waste Fees
8. Cash Transfers In
9. Land Sales

Expenditures

11. Operating Expenditures Categories A-L
   A. Legislative and Executive
   B. Planning
   C. Financial
   D. Judicial
   E. Fire, Police
   F. Parks, Recreation
   G. Water, Sewers
   H. Refuse Collection
   I. Road and Street Maintenance
   J. Employee Benefits
   K. Public Relations
   L. Library
12. Special Programs (new and continuing)
13. Transfers to Capital Budget
14. Transfers to Debt Retirement Fund
15. Cash Transfers Out

III. Capital Budget
1. Surplus or Deficit from previous cycle
2. Special Grants
3. Revenue Bond Sales
5. Transfers from Operating Budget
6. General Obligation Bond Sales

7. Continuing Capital Improvement Projects
8. New Capital Improvement Projects
9. Land Purchases

IV. Debt Retirement Fund
1. Surplus or Deficit from previous cycle
2. Transfers from Operating Budget
3. Special Debt Retirement Millage

4. Annual General Obligation Bond Payments

2. The Capital Budget is exclusively concerned with the financing of Capital Improvement Projects such as highways, parks, sewers, etc.

The capital improvements portion of the budget is concerned with satisfying the physical needs of the community. These needs are normally generated in one of two ways: community growth in a newly developing area, or community growth in a currently developed area requiring the renovation, expansion or replacement of existing facilities. In either case, the Politicians will be signalled as to the need to budget new capital improvements of a particular type by a decline in the Capital Plant Index in a particular area (as noted by the Planners) or by news items and issues appearing in the newspaper.

The Capital Plant Index is a ratio of the present dollar value of public facilities to a population equivalent, a figure used to reflect demand of both residents and employees in a given area (See Glossary, Chapter 2).

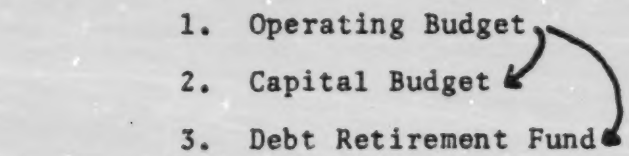
Capital Improvement Projects are listed in the Project List which is part of the Politicians printout. The projects are organized by budget categories including (1) streets, (2) sewers, (3) water, (4) parks and recreation, and (5) miscellaneous. The allowable locations for each project are shown on the Project List. Some projects are appropriate to an analysis area, some to a ward and others to an entire jurisdiction. A few projects are restricted to a particular analysis area. In addition to specifying a location for the project, the list indicates the area that will be affected by the project. This is the area which will share in the services of the project, and the area in which the Capital Plant Index will be affected. Another column indicates if any land will be required to initiate the project.

For each project, there is also a range of costs. The lower end of the range reflects stop gap measures while the higher end indicates high quality improvements. These figures represent the total dollar costs for the project. To obtain annual costs, the total must be divided by the number of years the project will run. For example, a project which costs $300,000 and runs for two (2) cycles will be amortized through two (2) installments of $150,000 each. A multiyear project which has been approved by the Politicians need not be resubmitted in subsequent cycles. It will automatically be continued for the number of years indicated on the project list. The final column will indicate whether or not this particular project could be funded through a revenue bond. Revenue and general obligation bonds will be covered later in this chapter.

Also included at the end of the capital improvement project is a list of Special Programs that the Politician may implement. These special programs differ from Capital Improvement Projects in that they primarily deal with social services and most of the costs are used to support personnel. However, in some cases facilities must be constructed or expanded to accommodate the special programs. In this case, a capital project will have to be requested also. Once the facilities are constructed they can continue to be used if, and when, the special program is renewed. The cost of the special program is similar to the capital project list except that the cost indicated in an annual cost rather than a total cost. Again, once a special program has been initiated, it must be carried for at least the number of cycles specified on the program list.

Another important set of circumstances which might prompt the Politicians to budget capital improvements involves attempts to attract new Exofirms to the community. Politicians may seek to locate such firms in a particular area in order to decrease the unemployment rate, add to the tax base, etc. A listing of the Exofirms desiring to enter the community, as well as their choice of location and the needed capital improvements, may be found on the business page of the METRO-APEX NEWS. Exofirms are discussed in more detail later in this chapter.

3. Debt Retirement Fund is the budget category from which money is expended each cycle to pay the purchasers of general obligation bonds the principal and interest due them. Money for the Debt Retirement Fund can come from either normal millage (transfers from the Operating Budget) or through a Special Debt Retirement Millage (tax). Money can be transferred from the Operating Budget to the Capital Budget and to the Debt Retirement Fund. However, this money cannot be transferred back.



If the Politician finds a deficit in the Capital Budget or Debt Retirement Fund, he can transfer money from the Operating Budget. If a surplus occurs in the Capital Budget or Debt Retirement Fund, or if a deficit occurs in the Operating Budget, the Politician cannot transfer funds out of these Budgets.

The question of "how much money should be kept in each of these budgets and funds?" is often posed. The Debt Retirement Fund should contain enough money to meet the minimum payment required for next cycle. Since the function of the City or County is to meet the needs of the people, the Politicians should generate enough funds to meet

those needs. Some cycles a surplus may be obtained while other cycles a deficit may be incurred. The Politicians should not tax the people just for the sake of building up a surplus in either the Operating or Capital Budget. The Politician should not regard his citizens as an industry, and need not show a profit each year. Obviously, a substantial deficit is even less desirable.

Budgeting Considerations. With respect of the Capital Budget in particular, the Politicians will have to make policy decisions with far-reaching consequences. Difficulties arise from the fact that there are a number of different constituent groups vying with one another for the allocation of always limited public resources. The most common of the conflicts is that between the residents of the inner-city (where public facilities are either deteriorating or inadequate and are in need of extensive repair or replacement) and the residents of the suburban or fringe areas (who are usually allied with real estate interests in their demands for new facilities and additional services). Another important conflict which may arise is that which exists between short-run political pressures and long-term public interest. Before making a final decision on the capital budget the Politician may want to weigh the possible consequences of alternative courses of action; to this end, he may wish to consult with the Planner who has considerably more information and expertise about the community.

The City and County Politicians, with the aid of Planners (City, County or Regional) could begin to develop a comprehensive program planning and program budgeting methodology. In doing so, they must develop a broader and more integrated view both of community problems and of their role as public managers. Attention should be given both to the actual as well as the projected needs of the community, and programs should be designed so as to make optimal use of community resources. These programs may span five or ten years, but should include yearly objectives to eventually meet stated goals.

In encouraging this approach, an attempt is made to prevent the role player from being locked into a narrow and restrictive point of view, which can result from developing programs on a "brush fire" or year-to-year basis. The emphasis here is placed on the proactive rather than the reactive approach to handling public problems.

The ideas suggested here are to:

(1) develop goals and objectives;
(2) develop programs to meet present and future needs;
(3) develop short term (yearly) as well as long (5-10 years) range budgets;
(4) calculate present expenditures and estimate future sources of revenue;

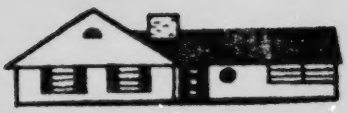
(5) develop implementation plans and schedules; and
(6) execute plans.

Such a systems approach cannot be completely outlined here, for that is the job of the Planners and Politicians; however, the following are important components of local governments and should, therefore, be given consideration in a program planning and program budgeting system.

A. Essential City/County services (fire, police, streets, water, sewers, recreation, etc.);
B. Administrative responsibilities (planning, judicial, personnel, legislative, financial);
C. Hospital care (new hospitals, clinics, location, financial aid, etc.);
D. Welfare (new approaches, methods for service and financing);
E. Transportation systems;
F. Housing (new areas of growth, use of Developers, housing for the aged and the poor, financial aid, etc.);
G. Taxes (new business/industry--where, what kind, new taxing alternatives, incentives, growth?);
H. Land use policies (growth, open space, housing--what kind, where, etc.);
I. Environmental quality management and control (air pollution, water, solid waste, aesthetics, etc.).

The above is only a sample of various kinds of systems concepts that can be developed about local government responsibilities, planning, and finance. The Politician is encouraged to be as creative as possible and to look beyond game constraints. The examples in this Chapter are only ideas and not exact instructions on how to proceed. Each Politician has his own concepts and ideas about how local government should run, and they should be recognized and used.

Millage and Assessed Valuation. Of equal importance to decisions about public expenditures are the decisions which the Politician must make each cycle with regard to the methods to be used to finance these expenditures. The major source of revenue available to the City and County is the property tax. Here, too, the importance of the growth of the area is evident, for as the jurisdiction grows, in population and economy, the property tax base will automatically grow. Each year the City and County Politicians send out assessors who look at the market value of property and then assess that property at a given percentage rate of the market value. An example might be helpful:



Market Value = $10,000

If the Assessment Rate = 50% of the market value, then the Assessed Value = $5,000.

The tax rate is in mills. One mill is equal to $1 of every $1,000 of assessed value of property. If there is a tax in effect of 5 mills, the example would look like this:

Market Value = $10,000	Assessed Value = $5,000

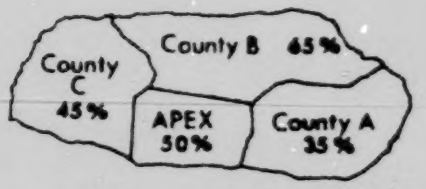
1 mill = $1 for every $1,000 of assessed value

Tax per Mill =	$ 5.
Actual Millage =	x 5 mills
Total Tax =	$25.

The person who owns this piece of property would then pay a tax of $25 on his property.

The Politician must decide how many mills are to be levied. Limits on the amount of millage which the Politician may impose are set by the State and by local ordinance, with the local limit never allowed to exceed the State limit. In addition to the millage rate allowed by law, the Politician may ask for a special millage, which must be submitted in a referendum to the voters of the community. When such a millage is sought by the Politician, he must make a public announcement of his request to other players in his jurisdiction and must obtain their signatures in a special opinion poll. Any special millage approved by the voters, which remains in effect for a specified number of years, is not included under the normal millage limits. People who live in the Central City are levied both a City and County property tax. These millage rates are independent of each other and are controlled by the Politician of each area. School taxes are collected by the school districts themselves and will not appear on the Politicians' printouts. This school tax is also levied on the assessed equalized value of the property.

State Equalization Factor. Under Item 1 - "TAX REVENUE" of the Operating Budget the Politician will see in parenthesis "(STATE EQUALIZATION FACTOR)". By State law each County must assess at the same rate. As stated earlier, APEX assesses at 50% of the market value of the property. However, not every county assesses at that same rate. Some counties assess at 35%, others at 45%, while others can assess at a much higher rate. The state then takes all these different rates and comes up with a common factor so that each county will then be assessing at the same rate. By multiplying this "STATE EQUALIZATION FACTOR" times the total assessed value of the entire community, the new total equalized value is the dollar amount that would be taxed that cycle.



Under item F of the "OPERATING BUDGET REVENUE GENERATION" the total equalized value for the next cycle is given. By using this figure, the Politician can quickly determine if his tax base has either increased or decreased this cycle.

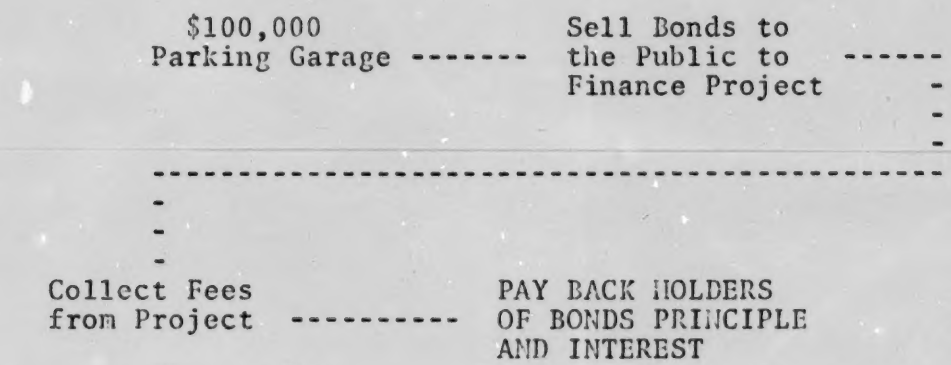
Bonding. To finance capital improvements, the Politicians may transfer funds from the Operating Budget to the Capital Budget or they may wish to ask for a General Obligation Bond, which, like a special millage, must be passed by a public referendum, after public announcement and an opinion poll. A millage rate to cover the annual bond repayment costs may be included in the bond referendum. This special debt retirement millage goes into a separate account and may be used for no other purpose than to pay off incurred bond indebtedness. Some capital improvements may be financed by revenue bonds, where the fees collected for the use of the facilities are used to pay off the bond. Projects for which such financing is allowable are noted in the Project List (see Chapter 6). Revenue Bonds are not submitted to the voters for approval.

1. Revenue Bonds

Revenue Bonds differ from general obligation bonds in that the project will be paid by the users instead of by taxes. These users are charged a fee, which is then used to pay-off the holders of the bond. This payment includes both principle and interest.

Example:

Politicians Decide to Implement Project Through Revenue Bond.



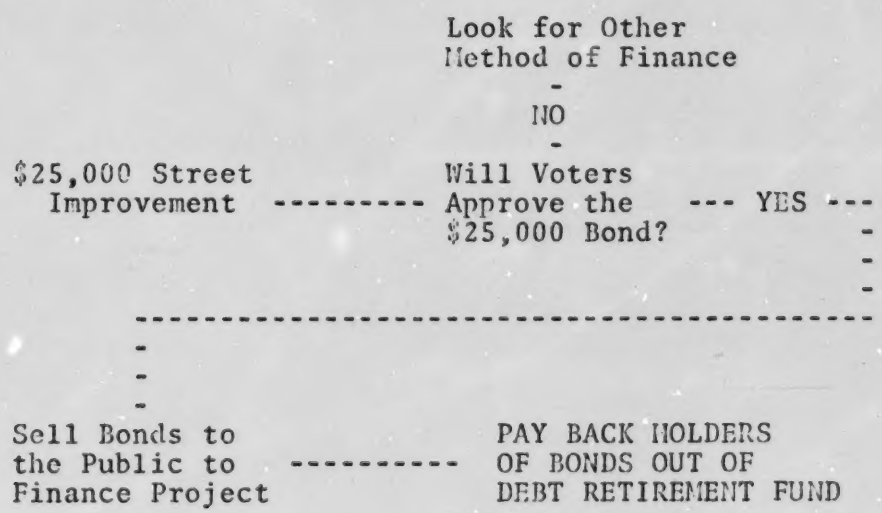
Not all projects can be financed through revenue bonds. Only those projects labeled YES in the last column of the project list can be financed through revenue bonds. Revenue bonds do not require voter approval, i.e. no referendum is needed.

2. General Obligation Bonds

General obligation bonds differ from revenue bonds in that they require voter approval (i.e. a referendum) before they can be sold, since the payments of these bonds will be made by taxing the citizen. These payments are then paid out of the Debt Retirement Fund.

Example:

Politicians Decide to Implement Project Through General Obligation Bond.



Both types of bonds attract speculators. Both bonds guarantee the interest for the life of the bond. If a General Obligation Bond could be paid off sooner, the interest would still have to be paid as to the original number of years stated on the bond. That is one reason why these bonds are not called in early. Secondly, the interest paid on these bonds is usually tax exempt at the local, state and federal levels.

Grants. A final outside source of funds for public capital improvements is, not unnaturally, the State and Federal government. If the Politician can present a good case for "Federal" or "State" funding of a project (e.g. public housing) they may give the County or City part of the necessary funds. How much of the cost of a project will be covered in this way will vary from case to case and will depend on agreements between the Politician and the State or Federal representative.

County roads, a major component of the County Capital Budget, are financed largely out of money received from State and Federal sources. A minimum of 20% of these Road Commission Funds must be expended each year on new construction of roads and streets, the remainder going into the Road and Street Maintenance item of the Operating Budget.

Budget Summary. Thus, three of the major activities of the Politician which should be carried out in each cycle of APEX are:

1. decisions about the level at which ordinary government services are to be budgeted and capital improvements undertaken;

2. a determination of methods of raising the necessary revenue; and

3. a determination of methods of retiring the public debt.

In addition to these activities, the Politician will be required to take a stand on issues which arise in the community during the year and which will be brought to his attention in the METRO-APEX NEWS. Some of these issues will have implications for operating and capital expenditures and, therefore, must be considered in formulating the budget. The Politician's recorded votes on these issues also have implications for his re-election.

Public Hearings. State law requires that public hearings be held before final approval is given to City and County budgets, zoning variances, and new rules and regulations. Often, in the chaos of a year's activity, Politicians miss receiving the full value of these public forums.

In the American tradition, hidden government is disliked by the governed, and contributes greatly to a negative public image of the

elected official. This in turn decreases his chances of re-election, makes difficult the implementation of public policy, and destroys the possibility of cooperation and support from community organizations. Public hearings, if properly conducted, can be an extremely valuable tool in the pursuit of a Politicians' goals. To be effective a public hearing must meet the following criteria:

1. The purposes of the meeting should be specified before hand, hopefully in some form of an agenda.
2. A chairperson should be designated. He will insure that the discussions stay on the subjects noted on the agenda, and that some semblance of order prevails.
3. Comments should be succinct, and to the point of contention.
4. Attendance by interested and concerned parties should be sought through adequate promotion and notification.

Due to the time pressures of a cycle's activity, "Roberts' Rules of Order" are often abridged. To allow one speaker to dominate discussion can be as defeating to the purposes of a meeting as the chaos of several speakers vying simultaneously for the floor. A flexible chairperson who is aware of the issues being discussed, as well as the personalities in attendance, and who maintains control can do much to insure meaningful dialogue.

Since a year's activity is compressed into a three- to four-hour cycle, each minute becomes very valuable. If the subject and purpose of the meeting is clearly established before hand, and each of the key speakers is informed of his topics and time limit, the goals of the meeting are more likely to be met. The task of judging the relevance of each presentation as it progresses falls upon the chairperson. He should be ready to interrupt or question a speaker who seems to be off the subject or issue.

To be democratic, a public meeting should be attended by representatives of all concerned groups in APEX County. Spokesmen for specific groups should be personally contacted and briefed early enough to allow them to prepare a concise statement of their perspective on the problems to be discussed (Pressure Group representatives particularly). If the issue is vital to the community as a whole, the News Media should be informed of the agenda. Public law in APEX County demands 10 minute public notice for all public hearings. This should be posted and announced publicly.

Exofirms. The Politician may look for additional methods of generating more income in his Operating Budget. One method of doing this is to attract an Exofirm into his jurisdiction. An Exofirm is an industry or bureaucratic firm that depends primarily upon markets outside the local area for its growth and vitality. These firms are usually

classified as Exofirms on the basis of their being net importers of dollars and net exporters of products or services to outside markets. Jobs created by Exofirm growth spur additional growth of households and jobs oriented to the local market.

If the Politician looks at the Business Page of the METRO APEX NEWS, he will see a section entitled "NEW FIRMS PLANNING TO COME TO APEX AREA."

Should the Politician decide that he wants to attract this firm, he can see the amount of property value that would be added to the tax base of his jurisdiction. It would also supply a number of new jobs thus alleviating welfare and other costs on the community. It can be seen that the Exofirm wishes to locate in a particular analysis area. The Politician can work with a local businessman and try to entice the Exofirm into an analysis area in his jurisdiction. It would be helpful if the Politician can persuade the Land Developer or Industrialist to invest some money in the Exofirm's development. The Politician should also work with the Planners to see if any rezoning might be required or if any land use category will be violated. Usually the Politician must initiate either one or a series of Capital Improvement Projects to satisfy the needs or that Exofirm. These projects should be noted in the Capital Budget.

Re-Election. The ultimate feedback on a Politicians conduct in public office comes through the decision of the voters to either return him to office or deny him further power in that position. In a democracy, retaining power is based on an empowering relationship that only begins with an election to office, and must be maintained daily through involvement in public and private dealings. Without this involvement his power can end in the next election or by recall.

PUBLIC VISIBILITY--one of the most important factors in any political career is that of visibility and public image. Who you are, and what you stand for is something that should be established from the start. In METRO-APEX, your initial election campaign and platform are subsummed by the fact that you now occupy the office, making it even more important to begin immediately to create your own public image, on the basis of which you expect to retain your position in upcoming elections. Define and analyze the constituency you represent--what are their needs, and how can you best meet them given the real constraints within which you work. On the basis of that, project to the voters your general objectives as well as your specific accomplishments. Use any opportunity to work through the News Media (television or METRO-APEX NEWS). You might find it valuable to develop a slogan or political name that is catchy.

YOUR POLITICAL MACHINE--there is much more to be done than you can hope to handle by yourself; therefore, involve others in the programs you are tackling. Assistance can be in the form of exchange of favors or through the like-mindedness of other sectors in the community. Cultivate these alliances and solicit their cooperation at re-election time. Plan and work towards your re-election from the beginning of your term in office.

CHAPTER 4

Annotated Worksheet

Chapter 4

ANNOTATED COUNTY POLITICIAN WORKSHEET

The Politician worksheet has five parts: (1) Elite Opinion Poll, (2) Operating Budget, (3) Capital Budget, (4) Debt Retirement Fund, and (5) News Releases. One Politician worksheet is turned in by each jurisdiction. The worksheet is the official budget and the record of decisions prepared for the computer for each cycle. After the Elite Opinion Poll is completed, it is recommended that the Debt Retirement Fund be completed next, followed by either the Operating or the Capital Budget.

I. ELITE OPINION POLL

Each year certain issues will appear in the METRO-APEX NEWS which require decisions from all role players, acting as the "elite or power structure of the community. In some cases the decision of the elite is binding on the Politicians and the poll can be considered the same as submitting a referendum to the voters. Here the METRO-APEX NEWS will read "DECIDED BY OPINION POLL MAJORITY." In other cases, the decision of the elite is merely advisory, and the Politicians can decide whether or not to heed their mandate. Here, the METRO-APEX NEWS will read "POLITICIAN'S ULTIMATE DECISION BUT ELITE OPINION SOLICITED."

The outcome of the vote will be recapitulated in the next cycle's newspaper. For each issue outcome, the newspaper will also print the reactions of five interest groups--Civil Rights Groups, Effective Government Groups, Business Community, Labor Vote, and Right-Wing Conservatives.

Players should vote on all issues in the Elite Opinion Poll, including those on the Business Page. Each role will have one vote. In the cases where there is more than one person in a role, they will have to come to an agreement.

The Elite Opinion Poll is especially important to the Politicians because their actions relative to the poll may affect their chances for re-election.

A sample of the "E.O.P. for Bond, Millage, or Raise in Local Limit" form is included in the worksheet. Additional forms are available in the game room.

Instructions: Indicate your role and the cycle number at the top of the page. Then put the issue number in the left hand column (this should not be confused with a project number), and the number of the alternative chosen in the adjacent column.

Example:

Issue No.	Alternative
42	2
1	3

BUDGET BALANCE SHEET

Part of the Politician's worksheet is a "Budget Balance Sheet." The Budget Balance Sheet is a summary of the current fiscal status of the jurisdiction. The budgetary objective of the Politician is to complete the Budget Balance Sheet. The remainder of the worksheet is used to calculate the amounts required on the Budget Balance Sheet and to record specific actions and decisions made by the Politicians during the cycle.

The following sample "Budget Balance Sheet is annotated to reflect the Politician's budget estimates and decisions included in the annotated worksheet which comprises the remainder of this chapter. A sample Politician's worksheet is in Chapter 5. An annotated computer printout summarizing the results of these decisions is in Chapter 8.

Decisions for Cycle_____

COUNTY POLITICIAN'S BUDGET BALANCE SHEET

II. Operating Budget

	Revenues and Transfers In		Expenditures	
1.	Surplus or Deficit from previous cycle (+6%)	473,537	11. Operating Expenditures Categories A thru H	5,766,069
2.	Property Tax Revenue	5,107,399	12. Special Programs	272,000
3.	Licenses and Permits	23,800	13. Transfer to Capital Budget	0
4.	Services	175,930	14. Transfer to Debt Retirement Fund	0
5.	Other Non-Tax Revenue	80,750	15. Cash Transfers Out	800
6.	Special Grants	42,000	16. Transfer to Road Fund	233,548
7.	Solid Waste Fees	59,052		
8.	Cash Transfers In	600		
9.	Land Sales	110,000		
10.	Road Comm. Revenue	1,167,739		
	TOTAL	7,245,807	TOTAL	6,272,417

NEW OPERATING BUDGET BALANCE 973,390

****

III. Capital Budget

	Revenues and Transfers In		Expenditures	
1.	Surplus or Deficit from previous cycle	300,000	7. Con't. Capital Project In printout, those with *'s	0
2.	Special Grants	0	8. New Capital Projects	575,000
3.	Revenue Bond Sales	325,000	9. Land Purchases	400,800
4.	Automatic Road Comm. Trans. from Operating Budget	233,548		
5.	Trans. from Operating Budget	0		
6.	General Obligation Bond Sales (if passed)	50,000		
	TOTAL	908,548	TOTAL	975,800

NEW CAPITAL BUDGET BALANCE -67,252

****

IV. Debt Retirement Fund

	Revenues and Transfers In		Expenditures	
1.	Surplus or Deficit from previous cycle	0	4. Annual G.O. Bond Payment	0
2.	Transfer from Operating Budget	0		
	TOTAL	0	TOTAL	0
3.	Special Debt Retirement Millage (if passed)	2,362,173		

NEW DEBT RETIREMENT FUND BALANCE (if millage passed) 2,362,173

The headings to the sections in this chapter refer to the line number on the Budget Balance Sheet of the worksheet.

II. OPERATING BUDGET

II-1. Surplus or Deficit from Previous Cycle

This is the amount in the budget from the previous year. It is found on line 6 of the "Operating Budget" page of last year's printout.

Instructions: Transfer the amount of line 6 of "NET SURPLUS OR DEFICIT TO BE CARRIED FORWARD" on last year's printout, plus 6% interest, to line II-1, "Surplus or Deficit from Previous Cycle", of the Budget Balance Sheet.

II-2. Property Tax Revenue

The principle method of revenue generation available to the Politician is levying a tax on the equalized assessed value of property within the jurisdiction, known as the Property Tax. The tax rate is set by the Politicians and is in mills, one mill being equal to $1 for every $1000 of assessed value of property. Therefore, if a piece of property is assessed at $10,000 and there is a tax in effect of 5 mills, the owner would owe $50 in taxes (5 mills x $10 = $50). The tax base of the jurisdiction changes with development in the area and with firms moving into or out of the area.

The operating millage (tax rate) is set by the Politicians and remains the same from cycle to cycle unless the Politicians change it. There are three elements to the Property Tax Revenue (Worksheet line II-2); property tax revenue expected without tax rate change (line II-2a), change in property tax expected from operating millage change (line II-2b), and additional property tax expected from special millage (line II-2c).

The normal operating millage is determined by local Politicians and the tax revenue generated there from is applied to standard operating costs of running the government. This millage is limited by State and local law. The local limit can never be higher than the limit set by the State.

Instructions for line II-2 of the Budget Balance Sheet - Property Tax Revenue: Line II-2 of the Budget Balance Sheet is calculated in Section 2 "Property Tax Revenue" of the "Calculations for Operating Budget" portion of the worksheet. Line II-2 is the sum of line 2a, 2b, and 2c. Line 2a will always be completed. Line 2b will be completed if a change is made in the operating millage, and line 2c will be completed if there are any special millages.

Instructions for line II-2a: To complete worksheet line II-2a, "TOTAL PROPERTY TAX REVENUE EXPECTED WITHOUT TAX RATE CHANGE" (from printout), transfer the amount of line G of "OPERATING BUDGET REVENUE GENERATION" on the last cycle's printout, "TOTAL PROPERTY TAX REVENUE FOR OPERATING BUDGET", to line 2a of "Calculations for Operating Budget" in worksheet.

Change in Operating Millage, Line 2b

The Politician can lower the operating millage in any cycle without the voter approval. He can also raise the operating millage in any cycle up to the local limit without voter approval.

It is sometimes helpful to the Politician to determine how much revenue could be generated next cycle through tax increase: To make this estimate the Politician should refer to the "OPERATING REVENUE GENERATION" of his printout. Looking at Item "F"--"TOTAL EQUALIZED VALUE, END OF CYCLE"--the Politician will find the equalized assessed value of all land in his jurisdiction. As mentioned before, $1 in taxes is generated for every $1000 of assessed value for each mill taxed. Therefore, if we take the value given on Item "F" and divide it by 1000, we would have the amount of revenue expected by a change of just one mill. Then by multiplying this amount by the proposed millage change, the Politician will have a good estimate of the amount of money this change will generate next cycle for the Operating Budget.

Instructions for line II-2b: To change operating millage: In column 1 or 2 check if you want to change the operating millage. If yes, place the operating millage rate change and the total new millage rate in column 4 and 5.

Example:

Change the Operating Millage			Old Millage Rate (from printout)	Millage Rate Change	Total New Millage Rate
YES		NO			
X			4.0	+0.5	4.5

Item "F" of Printout, "OPERATING BUDGET REVENUE GENERATION"	$638,425,344
Divide by 1000 for 1 mill change	$ 638,425
Multiply by millage rate change	$ .5
Property tax change expected from operating millage change (increase or decrease)	$ + 319,212

(Note: Total new millage rate may not exceed "LOCAL LIMIT ON NORMAL OPERATING MILLAGE", line B in printout, without a voter approved change in the local limit. See instructions later in this chapter.)

Additional Property Tax Expected from Special Millage:

A special millage can be levied to help finance a particular special program. Since this is a special millage, it requires voter approval. This special millage is submitted to the voters as a referendum. The Politician will circulate this referendum among the other players explaining why this special operating millage is required. Each player will then either vote for approval or disapproval of the special millage. The more players who approve this special millage [illegible] better chance of its passage. Promotional expenses may be [illegible]t thus helping in the passage of this special millage. If any promotional expenditures are to be made, then Item "K" of the Operating Budget in Section II-11 in the worksheet should show the amount of money to be spent. The Politician also has the option of resubmitting this referendum, one more time if it is voted down the first time. The referendum is then put back on the ballot but at a reduced rate, 15% below the original rate. This occurs in the computer in the same cycle if it is requested that the issue be resubmitted to the voters. Since it is a special tax, it usually only runs for one to four years. This millage is not subject to State and local limits.

Instructions for line II-2c of worksheet; To increase revenues by instituting special millages: Obtain a three-digit number from the Game Overall Director for column 1. In column 2 place the number of years the special millage will run. In column 3 put in the number of mills. In column 4 place promotion expenditures, if any. Check column 5 if you want the special millage to be resubmitted to the voters. Then take the opinion poll to as many players in the game for their signatures, either for or against the referendum.

Example:

C. Special Millages

Special Millage Number	No. of Years Special Millage Runs	No. of Mills	Promotional Expenditure in $	If voted down, re-submit? Yes	If voted down, re-submit? No
150	3	1	$500		X
151	3	.5		X	
152	3	2		X	

Total Number of Mills 3.5

Item "F" of printout, "OPERATING BUDGET REVENUE GENERATION"	$638,425,344
Divide by 1000 for 1 mill increase	$ 638,425
Multiply by Special Millage Increase	$ 3.5
Additional Property Tax Expected from Special Millage	$ 2,234,488

Total Property Tax Revenue

In the worksheet section II, total lines 2a, 2b and 2c and transfer this sum to the Budget Balance Sheet, line II-2. (If the special millages pass, the calculated figure should be the "TOTAL PROPERTY TAX FOR OPERATING BUDGET" section 1 of the printout for next cycle. See the annotated printout in Chapter 8 and the sample budget balance sheet at the end of this chapter.

Raise the Current Local Limit

If the Politicians want to raise taxes above the current local limit, he must submit this in the form of a referendum to the voters. The Politician will circulate this referendum among the players explaining why this increase is needed. Each player will either approve or disapprove this increase. The more players who approve this millage increase the better chance of its passage. Promotional expenditures may be spent thus helping in the passage of this millage increase. If any promotional expenditures are to be made, then Item "K" of the Operating Budget (Section II-11) in the worksheet calculations should indicate the money to be spent. The Politician also

has the option of resubmitting this referendum one more time if it is voted down the first time. The referendum is put back on the ballot at a reduced rate, 15% below the original rate. This occurs in the computer in the same cycle if it is requested that the issue be resubmitted to the voters. The new millage cannot be greater than the State limit.

Instructions: Obtain a three digit millage number from the Game Overall Director for column 1 of the worksheet. In column 2 enter the number of years you want the increase to run. In column 3 put the number of mills that you plan on increasing the local limit. In column 4 enter the promotion expenditures, if any. In column 5 check whether or not you want the referendum to be resubmitted to the voters. Finally, take the opinion poll to as many players in the game for their signature, and have them vote either for or against the referendum.

Example:

Raise Local Limit

Millage Number	Number of Years to Run	Millage Increase	Promotion Expenditure in $	If voted down, should it be resubmitted? YES	NO
151	3	2.0	none	X	

(This example is not reflected in the annotated printout, Chapter 8)

The form for polling the gamed players is found at the end of the worksheet.

II-3, II-4. General Non-Tax Revenue

The County obtains these additional revenues from:

** Licenses and Permits--hunting and fishing licenses, building permits, construction permits, marriage licenses, etc.
** Services--these revenues are paid by citizens and other agencies for special services performed by the County government.

The City obtains these additional revenues from:

** Other agencies (State, Federal)--revenue for education, welfare and state and federal public works projects, etc.
** Licenses, Fees and Fines--building permits, business licenses and traffic fines, etc.

Instructions:

FOR COUNTY: Transfer the amounts from Section G, entitled "OPERATING BUDGET REVENUE GENERATION" from last year's printout to the Budget Balance Sheet; line II-3 from "Licenses and Permits", and line II-4 from "Services."

FOR CITY: Transfer the amounts from Section G, of "OPERATING BUDGET REVENUE GENERATION" from last year's printout to the Budget Balance Sheet; line II-3 from "State, Federal" and line II-4 from "License, Fees and Fines."

II-5. Other Non-Tax Revenue

Other non-tax revenue includes money from parking meters, paid county hospital bills, airport charges, etc.

Instructions: Transfer the amount from Section G of "OPERATING BUDGET REVENUE GENERATION" from last year's printout to the Budget Balance Sheet; line II-5, "Other Non-tax Revenue."

II-6. Special Grants to Operating Budget

Special grants can be made to the Operating or Capital Budget. If the Politicians find themselves in financial difficulty because they have a new idea to improve the health and welfare of the people of either the City of County, propose a unique environmental study, find their jurisdictions declared a disaster area, or some other good reason for assistance, they can always request State and/or Federal funds. These funds are requested by submitting a written proposal (1 to 10 pages) to the Game Overall Director. The proposal should contain reasons why the funds are needed, why the local jurisdiction cannot fund the programs, how the money will be spent, the amount of matching funds, etc. The Game Overall Director will give the Politicians either all of the funds requested, part of the funds requested, or turn down the proposal.

Instructions: (Line II-6 of the Budget Balance Sheet is calculated within the worksheet under "Calculations for Operating Budget", Section II-6). In column 1 state the government agency that is granting the funds. In column 2 fill in the amount of the grant, and in column 3 the grantor's signature. A grant entry in the worksheet is required each year for the funds being granted that year. Total the annual amount and transfer this sum to the Budget Balance Sheet at line II-6.

Example:

6. Special Grants to Operating Budget

From	Amount this Year	Authorizing Signature
Federal	40,000	
State	2,000	

Total Special Grants $ 42,000

II-7. Solid Waste Fees

This is the amount of funds collected from user's of the jurisdiction's solid waste facilities.

Instructions: The value is determined during the year based on the disposal site fees set at the beginning of the year and on the amount of waste delivered during the year. Therefore an estimate must be made for the purposes of the budget worksheet. Unless substantial fee changes have been made a reasonable value to be included is that found in last years budget (printout) on line 2-E.

II-8. Cash Transfers In (from other players)

The reasons for cash transfers between the Politicians and the other players in the game are many and varied. They can represent fees for services rendered, indirect spending of campaign contributions, loan agreements between players, etc. They will be recorded under "MISCELLANEOUS NOTES" on the Politicians printout. If the County initiates a project with the City agreeing to pay for part of it, the County will initiate the project and pay the entire cost of the project. The City will then transfer its share of funds to the County through this cash transfer provision.

Instructions: (Section II-8 of "Calculations for Operating Budget" of worksheet.) Indicate the player from whom you are receiving a cash transfer in the first column, the amount of the cash transfer in the second column, and the reason in the third. Total the dollar values and transfer this value to line II-8 on the Budget Balance Sheet.

Example:

3. Cash Transfers In (from other players)

From Player	Amount	Reason
Dev. 5	$600	consulting services

Total Cash Transfers In $ 600

II-9. Land Sales, line II-9 of the Budget Summary Sheet

This value is calculated in Section II-9 of the CALCULATIONS FOR OPERATING BUDGET portion of the worksheet.

The City and the County own both vacant land and land on which public buildings, parks, etc. are located. Both types of land may be sold to the market or to other players. However, the land that public buildings, parks, etc. are on are not normally sold. (This property would have to be rezoned first.)

Instructions. (Section II-9 of "Calculations for Operating Budget.") In the 1st column list the buyer. In the 2nd column fill in the analysis area. In the third list whether the property is vacant or developed. In the 4th list the current zoning category. Use the 5th or the 6th columns to indicate the amount of property. Use "No. of Units" for developed residential property and "No. of Acres" for all vacant land and developed non-residential property. List the price per acre or unit in the 7th column and fill in the total price in column eight. Total the "Total Prices" and transfer to line II-9 "Land Sales", of the Balance Sheet.

Example:

9. Land Sales

Buyer	AA	Vac./Dev.	Zone Cat.	No. of Units or	No. of Acres	Price/Acre Price/Unit	Total Price
Dev 2	20	vac	R		5.0	2,000	10,000
Ind 1	6	dev	R-2	2		50,000	100,000

Total Land Sales $ 110,000

II-10. Road Commission Revenue (COUNTY ONLY)

There is no direct Road Commission Revenue for the City.

Road Commission revenue is collected by the State from the State Gasoline Tax. The State transfers a part of this money to each County's Operating Budget. The only State requirement is that 20% of this revenue is automatically transferred to the Capital Budget and should be used for road and street projects.

Instructions: Transfer the amount from Section G of "OPERATING BUDGET REVENUE GENERATION" of last year's printout to the Budget Balance Sheet line II-10, "Road Commission Revenue."

II-11. Operating Expenditures Categories A thru M (A thru L for City Politicians)

The Politician must also decide how much money he is going to allot for operation of his jurisdiction. If each Politician reviews his Operating Budget, he will see under Item "4", "OPERATING EXPENDITURES", those categories which he can control. It should be pointed out that the names of these categories will differ between the County and the other jurisdictions.

The Politician should enter changes in his worksheet only if he wishes to change the total expenditure to be devoted to a particular category. Except for Legislative expenditures, the Politician may enter either a percentage of total revenues to be spent or a dollar amount. If he decides not to change this section of the budget, the same percentages which were spent for each budget category in the preceding cycle will be spent in the new budget. The County Politicians must also approve the Environmental Quality Agency budget (Category G). This budget is presented by the EQA to the County Politicians in a public hearing. At this hearing explanation and justification is given for funds requested by the Environmental Quality Agency.

Instructions: (Section II-11, "Operating Expenditures Categories", in the "Calculations for Operating Budget.") If any values are changed, all values should be entered and all of the values totaled. The sum should be transferred to line II-11 of the Budget Balance Sheet.

II-12. Special Programs

Special Programs differ from Capital Improvement Projects in that Special Programs primarily deal with social services with most of the costs used to support personnel. However, in some cases, facilities must be constructed or expanded to accommodate the Special Programs. The Politician can pay for these Special Programs by either attaching a special millage to the program or by paying for it directly out of his Operating Budget. He cannot pay for a Special Program out of his Capital Budget. The total cost of all Special Programs should be determined and entered on line II-12 of Budget Balance Sheet.

A list of Special Programs can be found in Chapter 6.

Instructions: (Section II-12, "Special Programs", in "Calculations for Operating Budget.") In column 1 place the location. In column 2 place the program number. In column 3 or 4 check the method of funding. Place the cost per year in column 5. If a capital project is associated with this special program and is already in existence, indicate this in column 6. Finally, find the sum of the annual cost for all new special programs. Note, if the program is financed by a special millage, please enter the number of the millage. If any Special Program requires a Capital Improvement Project, be sure and include this project in the Capital Budget. DO NOT LIST EXISTING SPECIAL PROGRAMS ON THIS FORM.

Total annual costs per year of new special programs should be added to the total annual costs of continuing special programs (those with asterisks in the column entitled 'CYCLE TO RUN' in the printout to get the total for Section II-12--Total Annual Costs for Special Programs. This sum should be transferred to the Budget Balance Sheet line II-12.

Example:

II-12. Special Programs

Location	New Prog. Number	Method of Funding: Operating Budget	Method of Funding: Special Millage#	Cost Per Year	Required Proj. in Existence
Sub	10	X		120,000	
C.C.	12	X		12,000	
Twn 1	15	X		125,000	
Sub	13		151	15,000	

Total Annual Costs per Year of New Special Programs	$ 272,000
Total Annual Costs of Continuing Special Programs (those with astrisks in printout)	$ 0
Total Annual Cost for Special Programs this Cycle	$ 272,000

II-13. Transfers to Capital Budget

This value is usually filled in after completing Section III of the worksheet and determining whether or not a deficit will occur in the Capital Budget.

Instructions: After determining this value, enter it on lines II-13 and III-5 of the Budget Balance Sheet.

II-14. Transfer to Debt Retirement Fund

See section IV, "Debt Retirement Fund", of this chapter for instructions on how to determine the amount of Operating Budget Funds needed for the Debt Retirement Fund. After the amount is determined, enter it on lines II-14 and IV-2 of the Budget Balance Sheet.

Instructions: If the Politician decides to transfer funds from the Operating Budget to the Debt Retirement Fund the amount of the transfer should be entered in the Budget Balance Sheet on line II-14, "Transfer to Debt Retirement Fund", of the Operating Budget and line IV-2, "Transfer from Operating Budget", of the Debt Retirement Fund.

II-15. Cash Transfers Out (to other players)

The reasons for cash transfers between the Politicians and the other players in the game are many and varied. They can represent fees for services rendered, indirect spending of campaign contributions, loan agreements between players, and so forth. They will be recorded under "MISCELLANEOUS NOTES" on the Politicians printout. For example, if the County initiates a project with the City paying for part of it, the County pays the entire cost of the project and the City transfers its share of funds to the County through this cash transfer provision.

Instructions: Indicate the player to whom you are making a cash transfer in the first column, the amount of the cash transfer in the second column and the reason in the third. Total the dollar amounts and transfer this value to line II-15 of the Budget Balance Sheet.

Example:

II-15. Cash Transfers Out (to other players)

To Player	Amount	Reason	
Dev. #7	$600	consulting service	
Game Op.	$200	2 lines in NEWS	
Total Cash Transfers Out			$ 800

II-16. Transfers to Road Fund (County only)

These are revenues collected through a tax on gasoline. This money is collected by the State and then redistributed to each of the counties (into the Operating Budget). By State law at least 20% of this Road Commission Revenue will be automatically transferred to the Capital Budget. At least this much money must be spent for street and road projects. This money can be distributed throughout the entire County. The County Politician will find the dollar amount that should be spent on streets next cycle in the printout under "OPERATING BUDGET REVENUE GENERATION", Item "G". The last line reads:

NOTE--AT LEAST $ 243,123 , WHICH IS 20 PERCENT OF ROAD COMMISSION REVENUE WILL BE AUTOMATICALLY TRANSFERRED TO THE CAPITAL FUND AND MUST BE SPENT FOR STREET PROJECTS.

III. CAPITAL BUDGET

III-1. Surplus or Deficit from Previous Cycle

This is the balance in the Capital Budget from the previous year.

Instructions: Transfer from last years printout, "CAPITAL BUDGET FOR JURISDICTION", the amount given in line 10, "TOTAL CARRIED TO CYCLE," to line III-1 of the Budget Balance Sheet.

III-2. Special Grants to Capital Budget

See Section II-7 "Special Grants to Operating Budget." The instructions are the same. However, special grants to Capital Budget are used only for Capital Improvement Projects.

Instructions: Total the annual amount and transfer this sum to the Budget Balance Sheet, Line III-2.

III-3. Revenue Bonds Sales this Cycle

If the Politician examines his Project List (see Chapter 6), he will see that the last column is labeled "Revenue Bonds." There are certain projects which, if implemented, will be paid for by the users instead of by taxes. These users are charged a fee, which is collected by the jurisdiction. This money is then used to pay off both the principal and interest that is due to the holders of the Revenue Bonds. In essence, the project pays for itself. This payment continues for the life of the bond. All Revenue Bonds will automatically be sold, i.e., there is no voter approval needed.

Instructions: (In Section III-3 of the worksheet, "Calculations for Capital Budget.") The number of the Revenue Bond which is gotten from the Game Overall Director is entered in column 1. In column 2 enter the budget category from the 5th column of the Project List. In column 3 enter the number of cycles the Revenue Bond is to run. In column 4 enter the dollar amount that is to be spent for the project. In column 5 place the Capital Improvement Project number(s) associated with the specific Revenue Bond. Finally, the sum of all new Revenue Bonds should be calculated and transferred to line III-3 of the Budget Balance Sheet.

Example:

III-3. Revenue Bond Sales This Cycle

Revenue Bond No.	Budget Category	Cycles for Revenue Bond to Run	Dollars	Assoc. Proj. #
153	water	10	$125,000	54
154	streets	20	$200,000	19

Total Revenue Bond Sales This Cycle $ 325,000

III-4. Automatic Roads Commission Fund Transfer from Operating Budget (County only)

This value is the same as line II-16 of the Operating Budget and in the printout under "OPERATING BUDGET REVENUE GENERATION", Item "G".

III-5. Transfer from Operating Budget

This value is determined by the Politician to balance the Capital Budget if that is the desire of the Politician. After completing Section III, "Capital Budget" of the Budget Balance Sheet, the Politician can see if the "Revenues and Transfers In", lines 1 through 6 are sufficient to meet the total under "Expenditures" line 7 through 9. If the "Revenues and Transfers In" are insufficient to meet the "Expenditures", the Politicians may transfer money from the Operating Budget to the Capital Budget by entering the amount of transfer on Line II-13 and Line III-5 of the "Budget Balance Sheet."

III-6. General Obligation Bond Sales

Bonding is the process of incurring public debt by selling bonds in order to finance some Capital Improvement Project. Bonding is used to extend the payment of costs over a long period of time, rather than have costs met out of current revenues while the project is under construction. General Obligation Bonds differ from Revenue Bonds in three respects:

1) Before Politicians may float General Obligation Bonds to finance projects, voters must approve this action in a referendum. There is a state imposed limit on the indebtedness that a jurisdiction may incur through General Obligation Bonds.

2) General Obligation Bonds are paid off by taxing the citizens. This money comes either as a transfer from the Operating Budget or from a special tax known as a Special Debt Retirement Millage.

3) Any project that is not funded by a Revenue Bond can be funded through a General Obligation Bond.

The passage of a General Obligation Bond involves the submitting of a referendum to the voters. The Politician circulates an opinion poll among the other players explaining why this bond is needed. Each player indicates either his approval or disapproval of this bond. The more players who approve the bond the better the chance of passage. General Obligation Bonds are often long-term debts running from ten to twenty-five years. Promotional expenses may be spent to help in the passage of a bond. If any promotional expenditures are to be made, then Item "K" of the Operating Budget (Section 10 of the worksheet) should show the amount of money to be spent. The Politician also has the option of resubmitting this referendum one more time if it is voted down the first time. If the Politician so indicates, the referendum is automatically put back on the ballot but at a reduced rate of 15% of the original bond amount. This occurs in the same cycle, if the Politician so indicates on his worksheet.

Instructions: (Section III-6 of the worksheet, "Calculations for Capital Budget.") The number of the bond obtained from the Game Overall Director is entered in column 1. In column 2 enter the budget category which is taken from the 5th column of the Project List. In column 3 enter the number of cycles the General Obligation Bond is to run. (NOTE: this may be a much longer period of time than specified on the Project List. "CYCLES TO RUN" indicates construction time for the project.) In column 4 enter the amount of the General Obligation Bond. In column 5 place the promotion expenditures, if any. Check column 6 if you want the General Obligation Bond to be resubmitted to the voters. In column 7 list the associated Capital Improvement Project number(s). Then fill out an opinion poll (see the last sheet of the worksheet) and circulate it to as many players in the game as possible for their opinion either for or against the referendum. Finally, the sum of all new General Obligation Bonds should be calculated and transferred to line III-6 of the Budget Balance Sheet.

Example:

III-6. General Obligation Bond Sales

General Obli. Bond #	Budget Category	Cycles to Run	Amount	Promot. Expend. if any	Resub-mit?	Associated Project Number(s)
155	streets	10	50,000	5,000	yes	2

Each General Obligation Bond requires a separate public referendum.

Total General Obligation Bond Sales This Cycle $ 5,000

III-7. Continuing Capital Projects

This value is determined by totalling the annual costs of continuing Capital Improvement Projects. Continuing Capital Improvement Projects are those projects with asterisks on last cycles printout. This value should be transferred to line III-7 of the Budget Balance Sheet.

III-8. New Capital Improvement Projects

It is possible for the Capital Budget of the Politicians to have a surplus of funds. If Item "12", "UNENCUMBERED BALANCE", of the "Capital Budget" in the printout is positive, this represents a surplus and can be used to pay for new projects directly. These are funds that have not been committed to any new project. If Item "12" is negative, a deficit will result after all of the encumbered funds (funds required to finish current projects) are spent. If this is the case, the funding of your Capital Improvement Projects will have to be done by bonding or a transfer of the money required from the Operating Budget. It is not necessary to re-enter previously budgeted multi-year projects.

If after listing all of the new Capital Improvement Projects, the Politician finds he cannot afford to finance all of these projects, he will have to do one of the following: transfer funds from his Operating Budget; come up with an alternative scheme for funding; or decide which projects have the highest priority and delay implementation of those with the lowest.

he project should be initiated (AA number, jurisdiction number, etc.) In column 2 list the project number. In column 3 or 4 or 5 check the method of funding. In column 6 enter the total cost of the project. In column 7 place the number of years the project will run. In column 8 enter the annual cost of the project (determined by dividing the total cost of the project by the number of years to run). Finally, sum up the total annual cost of all projects. Transfer the total annual cost to line III-8 of the Budget Balance Sheet.

Note: If the project is financed by a revenue bond or a general obligation bond, please enter the number of the bond.

Example:

III-8. New Capital Improvement Projects

Location	Proj. No.	Method of Funding: Capital Budget	Revenue Bond #	G.O.# Bond	Total Cost	Cycles to Run	Annual Cost
AA 21	2			155	50,000	1	50,000
AA 6	19		154		500,000	2	250,000
AA 4	5	X			300,000	2	150,000
AA 8	54		153		125,000	1	125,000

Total Annual Cost of New Capital Projects $ 575,000

III-9. Land Purchases

There are certain Capital Improvement Projects that require land. By looking at column 4 of the Project List, (see Chapter 6) the Politician can see which projects require land. If one of these projects is initiated and there is vacant single residential land in the specified analysis area on that Politician's current property holdings, the project will be placed on this vacant land. If there is not enough land available, the Politician has the option of either buying the additional land himself or letting the computer buy it for him. The computer will automatically buy whatever type of land that is available. The computer will look first for vacant single family residential land. If there is none available, it will purchase developed land and charge the Politician demolition fees. In this case, the resulting purchase and demolition fees might cost the Politician as much as five times what it would have cost if he had purchased it himself. The Politician may want to consult the Planners or Developers for help in reading the tables that contain land distribution and prices. The Planners can also help the Politicians with any rezoning that may be required.

A record of all land purchases will appear under "MISCELLANEOUS NOTES" in the printout under a section labeled "REAL ESTATE TRANSACTIONS." The expenses will be listed as Item "7", "TOTAL LAND PURCHASES IN CYCLE", in the Capital Budget section of the printout.

Instructions: (Section III-9 of the worksheet, "Calculations for Capital Budget.") In column 1 indicate the player (Dev. 6, Ind. 3, etc.) from whom you are buying land, and in column 2 the analysis area of the land. If the Politician is not buying the land from a Developer or Industrialist, then enter "Market" in column 1. In column 3 enter whether the land is vacant or developed at the time of purchase and in column 4 indicate the zoning category or developed land use type. In column 5 enter the number of units involved, if the property is developed residential; otherwise, enter the number of acres in column 6. The negotiated price per acre or per unit is entered in column 7, and the total price in column 8. Then total all land purchase costs. This value is transferred to line III-9, "Land Purchases", of the Budget Balance Sheet.

Example:

III-9. Land Purchases

Seller	AA	Vac/ Dev.	Zone. Cat.	No. of Units	(or)	No. of Acres	Price/Acre Price/Unit	Total Price
Market	15	Vac	Comm			5.3	$ 36,000	190,800
Market	6	dev	R-2	10			$ 21,000	210,000
Total Land Purchases								$ 400,800

IV. DEBT RETIREMENT FUND

IV-1. Surplus or Deficit from Previous Cycle

As stated before, the Politicians must keep track of two budgets the Operating Budget and the Capital Budget. However, he must also keep track of his Debt Retirement Fund. If a Politician initiates a Capital Improvement Project that is to be paid for by the sale of General Obligation Bonds, payments must be made each cycle on the principal and the interest due on these bonds.

To find out how much is owed this cycle and to see if the Politician has generated enough money to meet the minimum payment, the Politician should turn to the section of his printout entitled "FINANCING OF CAPITAL FUND OF JURISDICTION" and look at section 1 and 2. Section 1 reads "GENERAL OBLIGA-

TION BONDS IN EFFECT." Listed here are all the general obligation bonds that were passed in his jurisdiction in all previous cycles. On the right hand side of the printout sheet, entitled "PAYMENT DUE IN CYCLE", is listed the principal and interest that must be paid this cycle, and the total amount due for the bond. At the bottom of the column is the grand total for all bonds. This total is the payment that the jurisdiction must make. The last item listed under Section 2 is "TOTAL DEBT RETIREMENT FUNDS AVAILABLE FOR CYCLE" (before transfers from general fund, if any). The dollar amount listed is how much money is available right now without transferring any money from the Operating Budget.

If the difference between these values is zero or positive there are enough funds in the Debt Retirement Fund to cover at least this year's expenditures. Any surplus will be carried over with 6% interest for the next cycle's use.

Instructions: The "Surplus or Deficit from Previous Cycle", Line IV-1 of the Budget Balance Sheet, is obtained from the line entitled "TOTAL DEBT RETIREMENT FUNDS AVAILABLE FOR CYCLE N" of Section 2, "DEBT RETIREMENT" section of last cycle's printout. This amount should be transferred to line IV-1 of the Budget Balance Sheet.

If the value is negative, there are two options available to the Politician. He can decide to transfer the amount needed directly from his Operating Budget or he can try to obtain a Special Debt Retirement Millage.

IV-2. Transfers from Operating Budget

Instructions: State the amount of the transfer desired on line IV-2, "Transfers from Operating Budget", and line II-4, "Transfer to Debt Retirement Fund", of the Budget Balance Sheet.

IV-3. Special Debt Retirement Millage

The second option involves submitting a Special Debt Retirement referendum to the voters. The Politician can fill out an opinion poll form (see the last page of the worksheet) and circulate this referendum among the other players explaining why this Special Debt Retirement Millage is needed. Each player will then either approve or disapprove of this special millage. The more players who approve this special millage the better chance of passage. Debt Retirement Millages are usually short term, since approval of long-term taxes are often voted down by the people in the community. Promotional

expenses may be spent to help the passage of this special millage. If any promotional expenditures are to be made, then Item "K" of the Operating Budget (Section 11 of the worksheet) should show the amount of money spent. The Politicians also have the option of resubmitting this referendum, one more time, if it is voted down the first time. The referendum is put back on the ballot but at the reduced rate of 15% of the original millage. This resubmittal occurs in the computer in the same cycle if the Politician so indicates on his worksheet. If the Special Debt Retirement Millage is defeated and not enough money is available in the Debt Retirement Fund to meet this cycle's payment (total is negative) then an underpayment penalty will be added on to the payment due next cycle.

Instructions: (Section IV-3 of the worksheet, "Calculations for Debt Retirement Fund.") Obtain from the Game Overall Director a three digit Special Debt Retirement Millage number and place it in column 1. Enter in column 2 with the number of years the special debt retirement is to run. Enter the millage rate in column 3. Enter promotional expenditures, if any, in column 4. Check column 5 if you want the referendum to be resubmitted to the voters. Then fill out and circulate an opinion poll to as many players as possible for their opinion either for or against the referendum. Calculate the additional taxes expected from the Special Debt Retirement Millage. Total the Special Debt Retirement Millage tax increase. Transfer the total to line IV-3 of the Budget Balance Sheet.

Example:

IV-3. Special Debt Retirement Millage

Special Debt Retire. Millage#	No. of Years To Run	Millage Rate	Promotional Expenditure	If voted down, Resubmit? YES	No
156	3	3.7	$5,000	X	

Each Special Debt Retirement Millage requires a separate public referendum.

Total Special Debt Retirement Millage 3.7

IV-4. Annual General Obligation Bond Payment

This value is in the printout in the Financing of Capital Fund section. The total is under "PAYMENT DUE IN CYCLE N" in Section 1 "GENERAL OBLIGATION BONDS IN EFFECT" of this section. This amount should be transferred to line IV-4 of the Budget Balance Sheet.

V. NEWS RELEASE

Each cycle you should report your activities to the community. This is partially accomplished by making a news release to the News Media.

Instructions: Develop and write a news release or publication. Present the news release to the representative of the News Media.

Example:

Politician's News Release

This year's budget was unanimously approved at a public hearing. Favorable support was expressed by the many interested citizen groups who participated in the open forum. A tax increase was avoided by the Politicians by their initiative in getting a special grant from the Federal government for needed public improvements.

CHAPTER 5

Worksheet

ELITE OPINION POLL

Role_____ Cycle Number_____

Issue No.	Alternative

Decisions for Cycle___

COUNTY POLITICIAN'S BUDGET BALANCE SHEET

II. Operating Budget

Revenues and Transfers In		Expenditures	
1. Surplus or Deficit from previous cycle (+6%)	_____	11. Operating Expenditures Categories A thru M	_____
2. Property Tax Revenue	_____	12. Special Programs	_____
3. Licenses and Permits	_____	13. Transfer to Capital Budget*	_____
4. Services	_____	14. Transfer to Debt Retirement Fund*	_____
5. Other Non-Tax Revenue	_____	15. Cash Transfers Out	_____
6. Special Grants	_____	16. Transfer to Road Fund	_____
7. Solid Waste Fees	_____		
8. Cash Transfers In	_____		
9. Land Sales	_____		
10. Road Comm. Revenue	_____		
TOTAL	_____	TOTAL	_____

NEW OPERATING BUDGET BALANCE _____

****

III. Capital Budget

Revenues and Transfers In		Expenditures	
1. Surplus or Deficit from previous cycle	_____	7. Con't. Capital Project In printout, those with *'s	
2. Special Grants	_____		_____
3. Revenue Bond Sales	_____	8. New Capital Projects	_____
4. Automatic Road Comm. Trans. from Operating Budget	_____	9. Land Purchases	_____
5. Trans. from Operating Budget	_____		
6. General Obligation Bond Sales (if passed)	_____		
TOTAL	_____	TOTAL	_____

NEW CAPITAL BUDGET BALANCE _____

****

IV. Debt Retirement Fund

Revenues and Transfers In		Expenditures	
1. Surplus or Deficit from previous cycle	_____	4. Annual G.O. Bond	
2. Transfer from Operating Budget	_____		
TOTAL	_____	TOTAL	_____
3. Special Debt Retirement Millage (if passed)	_____		

NEW DEBT RETIREMENT FUND BALANCE (if millage passed) _____

II. CALCULATIONS FOR OPERATING BUDGET

II-2. Property Tax Revenue

a. Total Property Tax Revenue expected without Tax Rate Change (from printout) + 6% interest $_____

b. Property Tax Change Expected from Operating Millage Change

Change the Operating Millage			Old Millage Rate	Millage Rate Change	Total New Millage Rate*
YES		NO			

Item "F" of Printout Operating Budget Revenue Generation _____
Divide by 1000 for 1 mill change _____
Multiply by millage change x_____

Property Tax Change Expected from Operating Millage Change $_____

c. Special Millage

Special Millage Number*	No. of Years Special Millage Runs*	No. of Mills*	Promot. Expend.*	If voted down, Resubmit?*	
				YES	NO

Total Number of Mills _____

Item "F" of Printout, Operating Budget Revenue Generation _____
Divide by 1000 for 1 mill increase _____
Multiply by Special Millage increase x_____

Property Tax Expected from Special Millage $_____

This requires a separate public referendum. Try to obtain the signatures of as many players as possible. A sample form for polling the players is found at the end of this worksheet.

Total Property Tax Revenue (2a, + 2b + 2c) $_____

Raise Local Limit (requires public referendum)

Millage Number*	Number of Years to Run*	Millage Increase*	Promot. Expend.*	If voted down, Resubmit?*	
				YES	NO

II-6. Special Grants to Operating Budget

From*	Amount* This Year	Authorizing Signature

Total Special Grants $_____

II-8. Cash Transfers In (from other players)

From Player	Amount	Reason

Total Cash Transfers In $_____

II-9. Land Sales

Buyer*	AA*	Vac/ Dev.*	Zone. Cat.*	No. of Units*	(or) No. of Acres*	Price/Acre Price/Unit*	Total Price

Total Land Sales $_____

II-11. Operating Expenditures Categories A thru M

Change in County Operating Expenditures

	Category:	% Total Revenue*	OR	$Amount
(A)	Legislation & Administrative (i.e., Planning, Financial, Etc.)	XXXXXXX		_____
(B)	Judicial	_____		_____
(C)	Public Safety	_____		_____
(D)	Parks Authority	_____		_____
(E)	Public Works Maintenance	_____		_____
(F)	Public Health	_____		_____
(G)	Environmental Quality Agency	XXXXXXX		_____
(H)	Refuse Collection	_____		_____
(I)	Road and Street Maintenance	_____		_____
(J)	Employee Benefits	_____		_____
(K)	Public Relations (Promotional Expenditures)			
	(1) Special Debt Retirement Millage	_____		
	(2) General Obligation Bonds +	_____		
	(3) Raising Local Operating Limits +	_____		
	(4) Special Millages +	_____		
	Total Promotional Expenditures	_____		_____
(L)	Library	_____		_____
(M)	Welfare and Hospitalization	_____		_____
	(11) TOTAL OPERATING EXPENDITURES CATEGORIES A THRU M			_____

XXXXXXXX - percentages do not apply to those categories. Please enter dollar amount only.

II-12. Special Programs

Location*	New Special Program Number*	Method of Funding: Operating Budget	Method of Funding: Special Millage#*	Cost Per Year	Is Required Capital Proj Existing?*

Total Annual Costs of New Special Programs $_____

Total Annual Costs of Continuing Special Programs (those with asterisks in printout) $_____

Total Annual Cost for Special Programs this Cycle $_____

II-15. Cash Transfers Out (to other players)

To Player*	Amount*	Reason

Total Cash Transfers Out $_____

III. CALCULATIONS FOR CAPITAL BUDGET

III-2. Special Grants to Capital Budget

From*	Amount* This Year	Authorizing Signature

Total Special Grants to Capital Budget $_____

III-3. Revenue Bond Sales This Cycle

Revenue Bond No.*	Budget Category*	Cycles for Revenue Bond to Run*	Dollars*	Assoc Proj.

Total Revenue Bond Sales This Cycle $_____

III-6. General Obligation Bond Sales

General Oblig. Bond #*	Budget* Category	Cycles to Run*	Amount*	Promot. Expend. $*	Resub-Imit?*	Associated Project Number(s)

Each General Obligation Bond requires a separate public referendum. You need to get the signatures of as many players in the room as is possible. The form for polling the gamed players is in this worksheet.

Total General Obligation Bond Sales This Cycle $_____

III-8. New Capital Improvement Projects

Location*	Proj. Num.*	Method of Funding: Capital Budget	Revenue Bond**	G.O.* Bond#	Total Cost*	Cycles to Run	Annual Cost

Total Annual Cost of New Capital Projects $_____

III-9. Land Purchases

Seller*	AA*	Vac/ Dev.*	Zone. Cat.*	No. of Units* (or)	No. of Acres*	Price/Acre Price/Unit*	Total Price

Total Land Purchases $_____

IV. CALCULATIONS FOR DEBT RETIREMENT FUND

IV-3. Special Debt Retirement Millage

Special Debt Millage No.*	No. of Years To Run*	Millage Rate*	Promot. Expend.* $	If voted down, Resubmit?* YES	NO

Each Special Debt Retirement Millage requires a separate public referendum. You need to get the signatures of as many players in the room as is possible. A sample form for polling the gamed players is found at the end of this worksheet.

Total Special Debt Retirement Millage _____

THIS SPACE FOR ROLE ADVISOR'S USE ONLY

E.O.P.
Bond, Millage, or Raise in Local Limit

Game Overall Director Assigned Number _____

Request for Approval of:

Bond [ ] Millage [ ] Raise in Local Limit [ ]

Brief Description of Purpose: _____

Player's Signatures	Role	Vote For	Vote Against

Player's Signature	Role	Vote For	Vote Against

Cycle No. _____ _____
(Name of the submitting role)

NEWS RELEASE

The following is submitted to the
News Media for possible publication.

_____

_____

_____

_____

_____

_____

_____

_____

Editors Recommendation: PRINT _____ TELEVISE _____

INVESTIGATE FURTHER OR REWRITE _____

.....

Cycle No. _____ _____
(Name of the submitting role)

NEWS RELEASE

The following is submitted to the
News Media for possible publication.

_____

_____

_____

_____

_____

_____

_____

_____

Editors Recommendation: PRINT _____ TELEVISE _____

INVESTIGATE FURTHER OR REWRITE _____

CHAPTER 6

Background Information

Chapter 6

BACKGROUND INFORMATION FOR POLITICIAN ROLE

A POLITICIAN'S CHECK-LIST

Politician's Internal Organization

-- Define constituency
-- Define their needs, problems, and issues
-- Formulate general policy objectives

Co. Board/City Council Internal Organization

-- Define joint constituency
-- Define priorities City/County needs, problems and issues
-- Formulate general policy objectives
-- Establish how group decisions will be made

Coordination with Staff

-- Establish channels of communication within staff
-- Describe to staff the agreed upon general policy objectives
-- Describe to staff their tasks and specific objectives
-- Define for staff their function in total County/City government
-- Initiate work and create feedback channels

Community Inputs

-- Open channels of communication with community
-- Initiate relationships with community leaders
-- Establish forums for the discussion of public issues (news media conferences, public meetings, etc.)
-- Enlist the assistance of community organizations in dealing with specific problems (task forces, study committees, etc.)
-- Channel feedback through staff

Re-election

-- Start identifying a platform
-- Start soliciting campaign contributions and other support
-- Find your allies and cultivate relationships
-- Public visibility... use the media

CHAPTER 7

References

Chapter 7

REFERENCES FOR POLITICIAN ROLE

Banfield, Edward C. Urban Government. New York: Free Press, 1961.

Bassett, James. "Five Diverse Cities--Each Tries to Preserve Its Identity," Los Angeles Times, November 20, 1972.

Break, George F. Agenda for Local Tax Reform. Berkeley, California, 1970.

Dahl, Robert. Who Governs. New Haven: Yale University Press, 1961.

Danielson, Michael (Ed.). "Metropolitan Politics : A Reader". Little Brown, 1970.

Denhart, Robert B. "Organizing the Budget Function" Municipal Finance. Volume 18, No. 4, May 1971.

Dunbar, Roger L. "Budgeting for Control" Administrative Science Quarterly. March, 1971.

Eckstein, Otto. "Public Finance" Washington: U.S. Government Printing Office.

Lewis, Verne B. Towards A Theory of Budgeting. 1968.

Mills, C. Wright. The Power Elite. New York: Oxford University Press, 1959.

Perloff, H.S., and Nathan, R.P. (Eds). Revenue Sharing and the City. Baltimore: John Hopkins Press, 1968.

Sharkansky, Ira. The Politics of Taxing and Spending. New York: The Bobbs-Merrill Company, 1969.

Wildavsky, Aaron. The Politics of the Budgetary Process. Boston: Little, Brown and Company, 1964.

Wingon, Lowden (Ed.) Reform of Metropolitan Governments. Baltimore: John Hopkins Press, 1972.

Alternative Approaches to Governmental Reorganization in Metropolitan Areas. Advisory Commission on Intergovernmental Relations. Washington: U.S. Government Printing Office.

Local Non-Property Tax and the Coordinating Role of the State. Advisory Commission on Intergovernmental Relations. Washington: U.S. Governmental Relations, September, 1961.

State and Local Governments. Washington: U.S. Government Printing Office, 1969.

Urban America and the Federal System. Advisory Commission on Intergovernmental Relations, Washington: U.S. Government Printing Office, 1969.

CHAPTER 8

Annotated Printout

This is the annotated Project List which contains both Capital Improvement Projects and Special Programs. Check with Game Overall Director for any changes to this list.

PROJ NUMB	LOCATED IN	CPI IMPACT	ACRES REQ'D	BUDGET CATEGORY	TITLE	CYCLES TO RUN	TOTAL DOLLAR COST MINIMUM	TOTAL DOLLAR COST MAXIMUM	REV. BOND
1	ANY AA	AA	0.0	STREETS	RESURFACING OF NEIGHBORHOOD STREETS	1	$ 6000.	$ 10000.	NO
2	ANY AA	AA	0.0	STREETS	RESURFACING OF SECONDARY STREETS	1	$ 50000.	$ 75000.	NO
3	ANY WARD	WARD	0.0	STREETS	REPAIR, RESURFACE PRIMARY STREETS	1	$ 100000.	$ 150000.	NO
4	ANY AA	AA	0.0	STREETS	WIDEN SECONDARY STREET	1	$ 90000.	$ 120000.	NO
5	ANY AA	WARD	0.0	STREETS	WIDEN PRIMARY THOROUGHFARE	2	$ 300000.	$ 400000.	NO
6	ANY AA	AA	0.0	STREETS	CONSTRUCT NEIGHBORHOOD STREETS	2	$ 35000.	$ 50000.	NO
7	ANY AA	AA	0.0	STREETS	CONSTRUCT SECONDARY STREET	2	$ 175000.	$ 225000.	NO
8	ANY AA	WARD	0.0	STREETS	CONSTRUCT PRIMARY STREET SEGMENT	2	$ 500000.	$ 750000.	NO
9	ANY AA	WARD	0.0	STREETS	CONSTRUCT EXPRESSWAY FEEDER STREET	4	$ 170000.	$ 220000.	NO
10	ANY AA	AA	0.0	STREETS	INSTALL NEIGHBORHOOD STREET LIGHTS	1	$ 20000.	$ 30000.	NO
11	ANY AA	AA	0.0	STREETS	NEW AREA-WIDE STREET LIGHTING	1	$ 50000.	$ 70000.	NO
12	ANY WARD	WARD	0.0	STREETS	NEW WARD-WIDE STREET LIGHTING SYSTEM	1	$ 150000.	$ 250000.	NO
13	ANY AA	AA	0.0	STREETS	NEIGHBORHOOD SIDEWALK CONSTRUCTION	1	$ 20000.	$ 50000.	NO
14	ANY AA	AA	0.0	STREETS	INSTALL TRAFFIC SIGNALS AT MAIN INTERSECTIONS	1	$ 12000.	$ 20000.	NO
15	ANY WARD	WARD	0.0	STREETS	PRIMARY STREETS - TRAFFIC SIGNAL SYSTEM	1	$ 50000.	$ 60000.	NO
16	ANY AA	AA	0.0	STREETS	EXPAND AND RENOVATE BRIDGE	1	$ 150000.	$ 200000.	NO
17	ANY AA	AA	0.0	STREETS	BUILD NEW BRIDGE	3	$ 250000.	$ 350000.	NO
18	ANY AA	AA	0.5	STREETS	PARKING LOT PAVING AND MARKING	1	$ 2000.	$ 4000.	YES
19	ANY AA	AA	2.0	STREETS	CONSTRUCT SMALL PARKING STRUCTURE	2	$ 500000.	$ 750000.	YES
20	ANY AA	AA	3.5	STREETS	CONSTRUCT LARGE PARKING STRUCTURE	3	$ 1000000.	$ 2000000.	YES
21	ANY AA	WARD	****	STREETS	EXPRESSWAY SEGMENT - STATE/FED FINANCING	3	$ 100000.	$10000000.	NO
30	ANY AA	AA	0.0	SEWERS	NEIGHBORHOOD SANITARY SEWER REPAIRS	1	$ 25000.	$ 30000.	NO
31	ANY AA	AA	0.0	SEWERS	NEIGHBORHOOD STORM SEWER REPAIRS	1	$ 20000.	$ 25000.	NO
32	ANY AA	AA	0.0	SEWERS	SANITARY SEWER TRUNKLINE REPAIRS	1	$ 45000.	$ 55000.	NO
33	ANY AA	AA	0.0	SEWERS	STORM SEWER TRUNKLINE REPAIRS	1	$ 40000.	$ 50000.	NO
34	ANY WARD	WARD	0.0	SEWERS	REPAIRS TO SANITARY INTERCEPTOR SYSTEM	1	$ 200000.	$ 275000.	NO
35	ANY WARD	WARD	0.0	SEWERS	REPAIRS TO STORM SEWER INTERCEPTORS	1	$ 185000.	$ 220000.	NO
36	ANY AA	AA	0.0	SEWERS	EXPAND SANITARY SEWER CAPACITY	1	$ 70000.	$ 300000.	NO

a USE THESE NUMBERS ON PLANNERS AND POLITICIANS WORKSHEETS.

b BE SURE TO SPECIFY IN WHICH ANALYSIS AREA, WARD, OR JURISDICTION YOU WANT THE PROJECT TO BE PLACED. NOTICE THAT SOME PROJECTS MUST BE LOCATED IN CERTAIN AA'S E.G. 101, 103, ETC.

c CPI IMPACT: (SEE CAPITAL PLANT INDEX IN YOUR GLOSSARY.) THIS COLUMN INDICATES THE AREA BENEFITTED BY EACH PROJECT, EITHER THE SPECIFIC AREA IN WHICH THE PROJECT IS PLACED OR THAT AREA PLUS A LARGER SURROUNDING AREA AS WELL.

d ADDITIONAL LAND SHOULD BE PURCHASED IF CITY OR COUNTY DOES NOW OWN ENOUGH VACANT ACREAGE; OTHERWISE LAND WILL BE PURCHASED AUTOMATICALLY FOR THE PROJECT BUT NOT AT THE BEST PRICES. AN ASTERISK IN THIS COLUMN MEANS THAT YOU WILL HAVE TO SUPPLY THE NUMBER OF ACRES.

e THESE CATEGORIES APPEAR ALSO ON OTHER CPI TABLES WHICH REPORT THE STATUS OF EACH ANALYSIS AREA (SEE PLANNERS OUTPUT).

f DESCRIPTION OF THE PROJECT

g SHOW NUMBER OF CYCLES (YEARS) TO COMPLETE CONSTRUCTION OF EACH PROJECT.

h INDICATES TOTAL COST OF EACH PROJECT, NOT ANNUAL. RANGE OF COSTS INDICATES LOW QUALITY TO HIGH QUALITY PROJECT. ANNUAL COST=TOTAL COST DIVIDED BY CYCLES TO RUN.

PROJ NUMB	LOCATED IN	CPI IMPACT	ACRES REQ'D	BUDGET CATEGORY	TITLE	CYCLES TO RUN	TOTAL DOLLAR COST MINIMUM	MAXIMUM	REV. BOND
37	ANY AA	AA	0.0	SEWERS	EXPAND STORM SEWER CAPACITY	1	$ 50000.	$ 200000.	NO
38	ANY WARD	WARD	0.0	SEWERS	EXPAND SANITARY INTERCEPTOR SYSTEM	2	$ 150000.	$ 400000.	NO
39	ANY WARD	WARD	0.0	SEWERS	EXPAND STORM SEWER INTERCEPTOR SYSTEM	2	$ 100000.	$ 300000.	NO
40	ANY AA	AA	0.0	SEWERS	CONSTRUCT NEW NEIGHBORHOOD SANITARY SEWER	1	$ 50000.	$ 60000.	YES
41	ANY AA	AA	0.0	SEWERS	CONSTRUCT NEW NEIGHBORHOOD STORM SEWER	1	$ 30000.	$ 40000.	NO
42	ANY AA	AA	0.0	SEWERS	CONSTRUCT NEW SANITARY SEWER TRUNKLINE	2	$ 350000.	$ 450000.	YES
43	ANY AA	AA	0.0	SEWERS	CONSTRUCT NEW STORM SEWER TRUNKLINE	2	$ 200000.	$ 260000.	NO
44	ANY WARD	WARD	0.0	SEWERS	CONSTRUCT NEW SANITARY SEWER INTERCEPTOR	3	$ 600000.	$ 750000.	YES
45	ANY WARD	WARD	0.0	SEWERS	CONSTRUCT NEW STORM SEWER INTERCEPTOR	3	$ 400000.	$ 500000.	NO
46	ANY JUR	JUR	1.5	SEWERS	UPGRADE SEWAGE TREAT. PLANT - SECONDARY TREAT	3	$ 250000.	$ 350000.	NO
47	ANY JUR	JUR	5.0	SEWERS	CONVERT SECONDARY TREAT. PLANT TO TERTIARY TR	4	$ 2500000.	$ 4000000.	NO
48	ANY JUR	JUR	1.0	SEWERS	EXPAND SEWAGE TREAT. PLANT CAPACITY BY 10 MGD	2	$ 3500000.	$ 5000000.	NO
49	ANY JUR	JUR	3.0	SEWERS	EXPAND SEWAGE TREAT. PLANT CAPACITY BY 25 MGD	3	$ 6500000.	$10000000.	NO
50	ANY AA	AA	0.0	WATER	MAJOR REPAIRS TO NEIGHBORHOOD WATER MAINS	1	$ 20000.	$ 35000.	NO
51	ANY AA	AA	0.0	WATER	EXPAND AREA WATER MAINS	3	$ 200000.	$ 275000.	YES
52	ANY AA	AA	0.0	WATER	CONSTRUCT NEW NEIGHBORHOOD WATER MAINS	1	$ 40000.	$ 50000.	YES
53	ANY AA	AA	0.0	WATER	MAJOR NEW WATER MAIN CONSTRUCTION	2	$ 300000.	$ 400000.	YES
54	ANY JUR	JUR	0.0	WATER	RENOVATE WATER FILTRATION PLANT	1	$ 100000.	$ 150000.	YES
55	ANY JUR	JUR	0.0	WATER	EXPAND FILTRATION PLANT CAPACITY	2	$ 200000.	$ 350000.	YES
60	ANY AA	AA	0.5	PARK-REC	DEVELOP AND EQUIP TOT LOT	1	$ 5000.	$ 10000.	NO
61	ANY AA	AA	0.5	PARK-REC	DEVELOP AND EQUIP VEST-POCKET PARK	1	$ 15000.	$ 20000.	NO
62	ANY AA	JUR	10.0	PARK-REC	DEVELOP A NATURAL AREA PARK	2	$ 25000.	$ 100000.	NO
63	ANY AA	JUR	20.0	PARK-REC	DEVELOP A NATURE PRESERVE	2	$ 15000.	$ 25000.	NO
64	ANY AA	JUR	60.0	PARK-REC	NINE-HOLE GOLF COURSE DEVELOPMENT	3	$ 70000.	$ 150000.	NO
65	ANY AA	WARD	1.5	PARK-REC	CONSTRUCT PUBLIC SWIMMING POOL	1	$ 200000.	$ 350000.	YES
66	ANY AA	WARD	5.0	PARK-REC	DEVELOP BALL FIELD	1	$ 20000.	$ 30000.	NO
67	ANY AA	AA	1.0	PARK-REC	CONSTRUCT FOUR TENNIS COURTS	1	$ 20000.	$ 50000.	NO
68	ANY AA	WARD	1.0	PARK-REC	BUILD A PUBLIC ICE SKATING RINK	1	$ 20000.	$ 25000.	NO

IF A PROJECT CAN BE FUNDED BY A REVENUE BOND (SEE GLOSSARY), "YES" IS SHOWN HERE. IF NOT, THE PROJECT MUST BE FUNDED THROUGH EXISTING CAPITAL BUDGET FUNDS, GENERAL OBLIGATION BOND, SPECIAL GRANT, OR OTHER.

PROJ NUMB	LOCATED IN	CPI IMPACT	ACRES REQ'D	BUDGET CATEGORY	TITLE	CYCLES TO RUN	TOTAL DOLLAR COST MINIMUM	MAXIMUM	REV. BOND
69	ANY AA	AA	0.0	PARK-REC	REPLACE PLAYGROUND EQUIPMENT	1	$ 5000.	$ 10000.	NO
70	ANY AA	WARD	0.0	PARK-REC	REPLACE PLAYFIELD EQUIPMENT	1	$ 10000.	$ 25000.	NO
71	ANY AA	WARD	0.0	PARK-REC	REPLACE PICNIC FACILITIES	1	$ 10000.	$ 25000.	NO
72	AA 7	JUR	0.0	PARK-REC	EXPAND AND RENOVATE CITY ZOO	1	$ 100000.	$ 350000.	NO
73	ANY AA	JUR	0.5	PARK-REC	CONSTRUCT BOAT-LAUNCHING FACILITIES	1	$ 2000.	$ 15000.	YES
74	ANY AA	CNTY	40.0	PARK-REC	DEVELOP NEW COUNTY PARK	1	$ 30000.	$ 100000.	NO
80	ANY AA	WARD	0.0	MISCELL	EXPAND AND RENOVATE FIRE STATION	2	$ 100000.	$ 150000.	NO
81	ANY AA	WARD	1.0	MISCELL	CONSTRUCT NEW FIRE STATION	3	$ 250000.	$ 350000.	NO
82	ANY WARD	WARD	0.0	MISCELL	PURCHASE NEW FIRE TRUCK	1	$ 50000.	$ 100000.	NO
83	ANY WARD	WARD	0.0	MISCELL	RENOVATE AND EXPAND POLICE STATION	2	$ 50000.	$ 100000.	NO
84	ANY AA	WARD	1.5	MISCELL	CONSTRUCT MODERN, NEW POLICE STATION	3	$ 350000.	$ 500000.	NO
85	ANY WARD	JUR	0.0	MISCELL	PURCHASE NEW POLICE-DISPATCHING EQUIPMENT	1	$ 50000.	$ 75000.	NO
86	ANY AA	JUR	5.0	MISCELL	CONSTRUCT A NEW CITY HALL	5	$ 500000.	$ 1500000.	NO
87	ANY AA	AA	0.0	MISCELL	NEIGHBORHOOD CENTER RENOVATION	1	$ 5000.	$ 15000.	NO
88	ANY AA	AA	0.0	MISCELL	NEIGHBORHOOD CENTER EXPANSION	2	$ 50000.	$ 80000.	NO
89	ANY AA	AA	1.0	MISCELL	NEIGHBORHOOD CENTER CONSTRUCTION	2	$ 100000.	$ 150000.	NO
90	ANY AA	JUR	1.0	MISCELL	BUILD 4-UNIT PACKAGE LOW-RISE PUBLIC HOUSING	3	$ 60000.	$ 75000.	NO
91	ANY AA	JUR	0.5	MISCELL	BUILD 10-UNIT PKG. HIGH-RISE PUBLIC HOUSING	3	$ 120000.	$ 140000.	NO
92	ANY JUR	JUR	0.0	MISCELL	RENOVATE AND EXPAND PUBLIC LIBRARY	2	$ 250000.	$ 500000.	NO
93	ANY AA	JUR	2.5	MISCELL	BUILD NEW COMMUNITY LIBRARY	3	$ 100000.	$ 1250000.	NO
94	ANY AA	JUR	8.0	MISCELL	CONSTRUCT NEW CIVIC-CENTER - AUDITORIUM	4	$ 1500000.	$ 2000000.	NO
100	ANY AA	CNTY	10.0	MISCELL	CONSTRUCT JUNIOR COLLEGE - COUNTY	3	$ 1250000.	$ 2500000.	NO
101	AA 7	CNTY	5.0	MISCELL	EXPAND AND RENOVATE GENERAL HOSPITAL - COUNTY	3	$ 2500000.	$ 4000000.	NO
102	ANY AA	CNTY	20.0	MISCELL	BUILD NEW GENERAL HOSPITAL - COUNTY	5	$ 9000000.	$15000000.	NO
103	AA 7	CNTY	0.0	MISCELL	EXPAND, RENOVATE MENTAL HEALTH CLINIC- COUNTY	2	$ 750000.	$ 1500000.	NO
104	ANY AA	CNTY	4.0	MISCELL	BUILD MENTAL HEALTH OUTPATIENT CLINIC- COUNTY	3	$ 70000.	$ 125000.	NO
105	AA 20	CNTY	0.0	MISCELL	EXPAND, RENOVATE JUVENILE HOME - COUNTY	2	$ 250000.	$ 500000.	NO
106	ANY AA	CNTY	40.0	MISCELL	DEVELOP NEW CEMETERY - COUNTY	1	$ 15000.	$ 25000.	NO

PROJ NUMB	LOCATED IN	CPI IMPACT	ACRES REQ'D	BUDGET CATEGORY	TITLE	CYCLES TO RUN	TOTAL DOLLAR COST MINIMUM	MAXIMUM	REV. BOND
107	AA 8	CNTY	0.0	MISCELL	EXPAND, RENOVATE SHERIFF STATION - COUNTY	2	$ 100000.	$ 250000.	NO
108	ANY AA	CNTY	1.0	MISCELL	BUILD SHERIFF'S SUBSTATION - COUNTY	3	$ 400000.	$ 600000.	NO
109	AA 29	CNTY	0.0	MISCELL	AIRPORT RUNWAY EXPANSION - COUNTY	3	$ 300000.	$ 500000.	NO
110	AA 29	CNTY	0.0	MISCELL	INSTALL RADAR FOR AIRPORT - COUNTY	1	$ 350000.	$ 500000.	NO
111	AA 29	CNTY	0.0	MISCELL	AIRPORT FACILITIES EXPANSION	2	$ 60000.	$ 90000.	NO
112	AA 8	CNTY	0.0	MISCELL	EXPAND, RENOVATE COUNTY COURT HOUSE	2	$ 200000.	$ 400000.	NO
113	AA 8	CNTY	0.0	MISCELL	EXPAND AND RENOVATE COUNTY OFFICE BUILDING	2	$ 250000.	$ 500000.	NO
114	ANY AA	JUR	0.8	MISCELL	CONSTRUCT SMALL COUNTY OFFICE BUILDING	2	$ 125000.	$ 200000.	NO
121	ANY AA	WARD	2.0	MISCELL	200 TONS/DAY MUNICIPAL INCINERATOR & CONTROLS	1	$ 2000[illegible].	$ 2300000.	NO
122	ANY AA	WARD	10.0	MISCELL	OPEN DUMP, 2000 TONS/DAY	1	$ 15000.	$ 25000.	NO
123	ANY AA	WARD	5.0	MISCELL	SANITARY LAND FILL- CLASS 1, 25,000 TON CAP.	1	$ 50000.	$ 60000.	NO
124	ANY AA	WARD	99.9	MISCELL	SANITARY LAND FILL-CLASS 2, 550,000 TON CAP.	1	$ 210000.	$ 220000.	NO
125	ANY AA	WARD	24.0	MISCELL	SANITARY LAND FILL-CLASS 3, 350,000 TON CAP.	1	$ 49000.	$ 52000.	NO
126	ANY AA	WARD	2.0	MISCELL	200 TONS/DAY TRANSFER STATION & TRUCK	1	$ 367000.	$ 400000.	NO
127	ANY WARD	WARD	0.0	MISCELL	TWO REFUSE COLLECTION TRUCKS, TYPE 1	1	$ 10000.	$ 15000.	NO
128	ANY WARD	WARD	0.0	MISCELL	TWO REFUSE COLLECTION TRUCKS, TYPE 2	1	$ 24000.	$ 30000.	NO
129	ANY WARD	WARD	0.0	MISCELL	TWO REFUSE COLLECTION TRUCKS, TYPE 3	1	$ 16000.	$ 23000.	NO
130	ANY WARD	WARD	0.0	MISCELL	METHANE GAS/LEACHATE REMOVAL SYSTEM	1	$ 125000.	$ 175000.	NO

SPECIAL PROGRAM	AVAILABLE FOR	CYCLES TO RUN	TITLE	COST PER YEAR	CAPITAL PROJECT ALSO REQUIRED
1	ANY AA	3	SUMMER RECREATION PROGRAM FOR POOR CHILDREN	$ 20000.	88
2	ANY AA	3	PARKWAY TREE-PLANTING PROGRAM	$ 15000.	
6	ANY WARD	3	DAY-CARE CENTER FOR CHILDREN OF WORKING MOTHERS	$ 50000.	89
10	ANY JUR	3	SUMMER CAMP PROGRAM FOR DISADVANTAGED YOUTH	$120000.	
12	ANY JUR	3	POLICE CIVILIAN REVIEW BOARD	$ 12000.	
13	ANY JUR	5	POLICE-COMMUNITY RELATIONS BUREAU	$ 15000.	
14	ANY JUR	3	RENT SUPPLEMENT PROGRAM FOR POOR FAMILIES	$200000.	
15	ANY JUR	4	MAJOR RETRAINING PROGRAM FOR UNEMPLOYED	$125000.	
16	ANY JUR	2	INTENSIFIED BUILDING CODE ENFORCEMENT PROGRAM	$110000.	
17	ANY JUR	3	RAT ERADICATION PROGRAM	$100000.	
18	ANY JUR	2	SUBSIDIZING OF CITY BUS LINE	$200000.	
19	ANY JUR	4	EXPAND JUVENILE COURT PROGRAM	$ 50000.	
20	ANY JUR	3	SUPPORT OF RIVER BEAUTIFICATION COMMITTEE	$ 5000.	
21	ANY JUR	4	DUTCH ELM DISEASE TREE SPRAYING PROGRAM	$ 50000.	
30	COUNTY	3	VISITING NURSE PROGRAM FOR POOR FAMILIES	$ 50000.	
32	COUNTY	2	FAMILY-TO-FAMILY VOLUNTEER WELFARE PROGRAM	$ 20000.	
33	COUNTY	10	INTENSIFIED MEAT INSPECTION PROGRAM	$ 40000.	
36	COUNTY	4	MATERNITY AND PEDIATRICS CLINIC PROGRAM	$100000.	114
37	COUNTY	2	GERIATRICS CLINIC PROGRAM	$150000.	
38	COUNTY	4	PSYCHIATRIC OUTPATIENT CLINIC PROGRAM	$100000.	104

j USE THESE SPECIAL PROGRAM NUMBERS FOR PLANNERS AND POLITICIANS WORKSHEETS.

k INDICATES WHERE A PROGRAM MAY BE LOCATED: EITHER AA-WIDE, JURISDICTION-WIDE, OR COUNTY-WIDE. BE SURE TO SPECIFY IN WHICH AA, WARD, OR JURISDICTION YOU WANT THE PROGRAM TO BE PLACED. NOTE THAT A "COUNTY" PROGRAM BENEFITS THE ENTIRE COUNTY AND CANNOT BE PLACED IN A SMALLER AREA.

l DESCRIPTION OF PROGRAM.

m CERTAIN SPECIAL PROGRAMS REQUIRE FACILITIES (HENCE A CAPITAL PROJECT LOCATED IN THE SAME AREA) IN ORDER FOR THE PROGRAM TO BE ENACTED. THESE CAPITAL PROJECTS MAY BE FOUND IN THE CAPITAL PROJECT LIST ABOVE. NOTE: IF A SPECIAL PROGRAM IS A CONTINUATION OF AN EXISTING PROGRAM, A NEW CAPITAL PROJECT IS NOT REQUIRED. DO NOT RESUBMIT MULTI-YEAR PROGRAMS EACH YEAR.

SPECIAL PROGRAM	AVAILABLE FOR	CYCLES TO RUN	TITLE	COST PER YEAR	CAPITAL PROJECT ALSO REQUIRED
41	COUNTY	1	NOISE POLLUTION ABATEMENT ENFORCEMENT	$ 10000.	
42	COUNTY	1	PESTICIDE PUBLIC INFORMATION PROGRAM	$ 5000.	
43	COUNTY	1	RADIOLOGICAL HEALTH PROGRAM	$ 20000.	
44	COUNTY	1	MOSQUITO ABATEMENT PLAN	$ 30000.	
45	COUNTY	1	ANTI-LITTER CAMPAIGN	$ 6500.	
46	COUNTY	1	PLACEMENT OF LITTER RECEPTACLES IN DOWNTOWN AREA	$ 15000.	
47	COUNTY	1	MALICIOUS GRAFFITI REMOVAL FROM HISTORICAL SITES	$ 9000.	
48	COUNTY	1	VOLUNTARY NEIGHBORHOOD CLEANUP PROGRAM SUPPORT	$ 1500.	
49	COUNTY	1	PROGRAM TO REDUCE HEAVY MACHINERY NOISE	$ 4500.	
51	COUNTY	1	ENFORCEMENT PROGRAM TO PREVENT SOIL EROSION	$ 7500.	
52	COUNTY	1	RADIATION SAFETY PROGRAM	$ 10000.	
53	COUNTY	1	PROTECTION OF CRITICAL ECOLOGICAL AREAS PROGRAM	$ 3500.	
54	COUNTY	1	TOW AWAY PROGRAM FOR ABANDONED AUTOS	$ 12500.	
55	COUNTY	1	LICENSING FOR X-RAY TECHNICIANS	$ 3500.	
56	COUNTY	1	TREE PLANTING PROGRAM IN DOWNTOWN AREA	$ 10000.	

the following pages represent the annotated printout for the County Politician. The decisions are representative of the types of decisions that the County Politician could make. Some of the rationale for making these decisions are explained in Chapter 4 of this manual.

MISCELLANEOUS NOTES FROM CYCLE 1

REFERENDUM NUMBER	TYPE OF ACTION REQUESTED	LIMITING ACTION TAKEN	VOTER TURNOUT	RESPONSE PC FAVORING	RESULT
152	SPEC. OPER. MILLAGE	2.0 MILLS	41205.	75.0	PASS
155	BOND ISSUE $	50000.	41205.	75.0	PASS
156	SPEC. DT.R. MILLAGE	3.7 MILLS	41205.	75.0	PASS
150	SPEC. OPER. MILLAGE	1.0 MILLS	41205.	75.0	PASS
151	SPEC. OPER. MILLAGE	0.5 MILLS	41205.	75.0	PASS

CASH TRANSFERS BETWEEN GAME PLAYERS. CYCLE 1

TO WHO	TO AMOUNT	FROM WHO	FROM AMOUNT	REMARKS
07	$ 600.	05	$ 600.	
0P	$ 200.			

REAL ESTATE TRANSACTIONS BY COUNTY BOARD

A

SALES

AA	(UP FOR SALE ARE) X UNITS OR ACRES	OF TYPE	(AT) $/U OR $/ACRE	TO	SOLD X	TOTAL PRICE
6	2.0	R-2	$ 50000.	II	2.0	$ 100000.
15						
20	5.0	V-R	$ 2000.	02	5.0	$ 10000.
6						
TOTALS						$ 110000.

A

PURCHASES

B

(BID FOR ARE) X UNITS OR ACRES	OF TYPE	(AT) $/U OR $/ACRE	FROM	BOUGHT X	DEMOL. COST	TOTAL COST
10.0	R-2	$ 21000.	M	10.0	$ 0.	$ 210000.
5.3	V-C	$ 36000.	M	5.3	$ 0.	$ 190800.
2.0	V-MX	$ 2.	M	2.0	$ 0.	$ 45000.
						$ 445800.

C

NOTE -- IF LOCAL GOV'T OR COUNTY BUYS OR SELL PUBLIC LAND, IT BECOMES VACANT

A PRICES ARE AT $ PER UNIT FOR DEVELOPED RESIDENTIAL PROPERTY, $ PER ACRE FOR ALL OTHERS.

B BOUGHT FROM GENERAL MARKET

C VACANT LAND (A MIX OF VARIOUS LAND USE ZONINGS)

CURRENT PROPERTY HOLDINGS AFTER CYCLE 1

(DEVELOPED RESIDENTIAL IN UNITS, ALL OTHER VALUES ARE IN ACRES)

		RESIDENTIAL					NON-RESIDENTIAL					
		SINGLE			MULTIPLE		COMMERCIAL		INDUSTRIAL		OFFICE	AGRICULT
AA	STATUS	R-1	R-2	R-3	M-1	M-2	LOCAL	REGIONAL	LOCAL	EXOG.	EXOG.	
1		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 208.9 ACRES										
2		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 343.6 ACRES										
3		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 221.7 ACRES										
4		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 116.0 ACRES										
5		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 294.9 ACRES										
6	DEVELOPED	0	8	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
		PUBLIC BUILDINGS, PARKS, ETC. = 2.0 ACRES, STREETS AND RIGHT-OF-WAY = 287.1 ACRES										
7		PUBLIC BUILDINGS, PARKS, ETC. = 20.0 ACRES, STREETS AND RIGHT-OF-WAY = 229.9 ACRES										
8		PUBLIC BUILDINGS, PARKS, ETC. = 7.0 ACRES, STREETS AND RIGHT-OF-WAY = 280.0 ACRES										
9		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 139.9 ACRES										
10		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 446.3 ACRES										
11		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 443.8 ACRES										
12		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 602.1 ACRES										
13		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 562.6 ACRES										
14		PUBLIC BUILDINGS, PARKS, ETC. = 0.0 ACRES, STREETS AND RIGHT-OF-WAY = 1195.7 ACRES										
15	VACANT	0.0		0.0			5.30		0.0		0.0	0.0

D THIS LAND IS AVAILABLE FOR CAPITAL PROJECTS

E RIGHT-OF-WAY INCLUDES SIDEWALKS AND SHOULDERS FOR ROADS

OPERATING BUDGET IN EFFECT DURING CYCLE 1

1. TAX REVENUE --- TOTAL ASSESSED VALUE, END OF CYCLE 0 $ 1269155840.
X 0.503 (STATE EQUALIZATION FACTOR)
= $ 638425344. (TOTAL EQUALIZED VALUE)
X 8.00 (TOTAL OPERATING MILLS)
= TOTAL PROPERTY TAX FOR OPERATING BUDGET $ 5107400.

2. OTHER REVENUE

	PERCENTAGE OF 3.	
A. LICENSES AND PERMITS	0.33	$ 23800.
B. SERVICES	2.43	175930.
C. OTHER GENERAL	1.11	80750.
D. SPECIAL GRANTS	0.58	42000.
E. SOLID WASTE FEES	0.81	59052.
F. CHECK DEPOSITS FROM OTHER PLAYERS	0.01	600.
G. LAND SALES	1.52	110000.
H. ROAD COMMISSION	16.12	1167739.
I. DEFICIT OR SURPLUS FROM CYCLE 0 (WITH 6 PERCENT INTEREST)	6.60	478537.

3. TOTAL GENERAL (OPERATING) FUND $ 7245806.

4. OPERATING EXPENDITURES

	PERCENT OF 3.	PER CAPITA	STANDARD PER CAPITA	AMOUNT
A. LEGISLATIVE AND ADMINISTRATIVE	4.12			$ 298376.
B. JUDICIAL	7.20	2.31	1.47	521698.
C. PUBLIC SAFETY	9.80	3.15	2.00	710089.
D. PARK AUTHORITY	3.50	1.12	0.71	253603.
E. PUBLIC WORKS MAINTENANCE	2.50	0.80	0.51	181145.
F. PUBLIC HEALTH	3.90	1.25	0.80	282586.
G. ENVIRONMENTAL QUALITY AGENCY	1.22			88200.
H. REFUSE COLLECTION	0.80	0.26	1.51	57820.
I. ROAD & STREET MAINTENANCE	20.60	6.61	4.20	1492635.
J. EMPLOYEE BENEFITS	2.10			152162.
K. PUBLIC RELATIONS	0.14			10500.
L. LIBRARY	1.30	0.42	0.27	94195.
M. WELFARE AND HOSPITALIZATION	22.40	358.45*	238.99*	1623060.
N. CHECK PAYMENTS TO OTHER PLAYERS	0.01			800.
O. SPECIAL PROGRAMS (LISTING NEXT PAGE)	3.75			272000.
P. TRANSFER TO CAPITAL FUND	0.0			0.
Q. TRANSFER TO DEBT RETIREMENT	0.0			0.
R. TRANSFER TO ROADS CAPITAL FUND (INCLUDED IN CAPITAL FUND)	3.22			233548.

5. TOTAL OPERATING EXPENDITURES 86.57 $ 6272413.

6. NET SURPLUS OR DEFICIT TO BE CARRIED FORWARD TO CYCLE 2 $ 973393.

* WELFARE STANDARDS ARE BASED ONLY ON LOW-INCOME (TYPE 5) POPULATION

F FROM STATE AND FEDERAL GOVERNMENTS

G REVENUE TOTAL

H WITHIN THIS JURISDICTION

I U.S. AVERAGE

J THIS IS THE TAX BASE TO WHICH THE MILLAGE RATE IS APPLIED TO DETERMINE THE TAXES COLLECTED

K FUNDS MAY BE TRANSFERRED FROM OPERATING BUDGET TO CAPITAL AND DEBT RETIREMENT BUDGETS BUT NOT VICE-VERSA

SPECIAL PROGRAMS IN EFFECT IN CYCLE 1

PROG NUM.	LOCATED IN	REQUIRED CAPITAL PROJECT	TITLE	FUNDED BY MILL	CYCLES TO RUN	ANNUAL COST
10	JUR 2	L	SUMMER CAMP PROGRAM FOR DISADVANTAGED YOUTH	M	3 *	$ 120000.
12	JUR 1		POLICE CIVILIAN REVIEW BOARD		3 *	$ 12000.
15	JUR 3		MAJOR RETRAINING PROGRAM FOR UNEMPLOYED		4 *	$ 125000.
13	JUR 2		POLICE-COMMUNITY RELATIONS BUREAU	151	5 *	$ 15000.

OPERATING BUDGET REVENUE GENERATION

MILLAGE LEVELS AND LIMITS (WITHOUT FURTHER VOTE)

A. STATE LIMIT ON NORMAL OPERATING MILLAGE = 10.00

B. LOCAL LIMIT ON NORMAL OPERATING MILLAGE = 5.00 N

C. NORMAL OPERATING MILLAGE REQUESTED = 4.50 (IF UNCHANGED FROM CURRENT CYCLE)

D. SPECIAL OPERATING MILLAGES IN EFFECT -- THROUGH CYCLE

NUMBER	MILLS	1	2	3	4	5	6	REVENUES -- CYCLE 2
152	2.00	*	*	*				$ 1313685.
150	1.00	*	*	*				$ 656843.
151	0.50	*	*	*				$ 328421.
TOTAL		3.50	3.50	3.50	0.0	0.0	0.0	$ 2298948.

E. TOTAL OPERATING MILLAGES EFFECTIVE CYCLE 2 BEFORE ADDING NEW MILLAGE = 8.00

F. TOTAL EQUALIZED VALUE, END OF CYCLE 1 = $ 656842752.

G. TOTAL PROPERTY TAX REVENUE FOR OPERATING BUDGET IN CYCLE 2 = $ 5254740. (= E. X F.)

O
$ 26061. (LICENSES AND PERMITS)
$ 186134. (SERVICES)
$ 120156. (OTHER NON-TAX REVENUE)
$ 1215615. (ROAD COMMISSION -- SEE NOTE BELOW)
$ 973393. (SURPLUS OR DEFICIT FROM CYCLE 1)

= $ 7776098. TOTAL OPERATING REVENUES FOR CYCLE 2 (PROJECTED WITHOUT TAX RATE CHANGE)

NOTE -- AT LEAST $ 243123., WHICH IS 20 PERCENT OF ROAD COMMISSION REVENUE WILL BE AUTOMATICALLY TRANSFERRED TO THE CAPITAL FUND AND MUST BE SPENT FOR STREET PROJECTS.

FYI TRACK PAGING PENDING

L SOME SPECIAL PROGRAMS REQUIRE CONSTRUCTION OF CAPITAL FACILITIES TO HOUSE THEM

M IF A SPECIAL PROGRAM IS FINANCED THROUGH A SPECIAL MILLAGE, THE NUMBER OF THAT MILLAGE APPEARS HERE

N NORMAL OPERATING MILLAGE WHICH THE GOVERNMENT MAY ALTER FROM YEAR TO YEAR, IS SUBJECT TO BOTH LOCAL AND STATE CEILINGS. THESE RESTRICTIONS DO NOT APPLY TO SPECIAL MILLAGES

O THESE ARE REVENUE ESTIMATES FOR NEXT YEAR

CAPITAL BUDGET FOR JURISDICTION 5

• BALANCE OF CAPITAL FUND FROM CYCLE 0	$	300000.
• NEW BOND SALES	$	375000.
• TRANSFERS FROM GENERAL FUND	$	233548.
• SPECIAL GRANTS	$	0.
• TOTAL CAPITAL IMPROVEMENT FUND, CYCLE 1	= $	908548.

THE FOLLOWING CAPITAL IMPROVEMENT PROJECTS WERE CARRIED IN CYCLE 1
(INCLUDES MULTI-YEAR PROJECTS APPROVED IN PREVIOUS CYCLES)

PROJ NMB	LOCATED IN	CPI IMPACT	ACRES USED	BUDGET CATEGORY	TITLE	FUNDED BY BOND	CYCLES TO RUN		ANNUAL COST
2	AA 21	AA		STREETS	RESURFACING OF SECONDARY STREETS	155	1		$ 50000.
19	AA 6	AA	2.0	STREETS	CONSTRUCT SMALL PARKING STRUCTURE	154	2	*	$ 250000.
5	AA 4	WARD		STREETS	WIDEN PRIMARY THOROUGHFARE		2	*	$ 150000.
84	JUR 1	JUR		WATER	RENOVATE WATER FILTRATION PLANT	153	1		$ 125000.

• TOTAL DISBURSEMENTS (OTHER THAN LAND) IN CYCLE 1 $ 575000.

• TOTAL LAND PURCHASES IN CYCLE 1	$	445800.
• BALANCE REMAINING IN CAPITAL FUND	= $	-112252. (LINE 5 MINUS LINES 6 AND 7)
• INTEREST ON BALANCE	= $	0.
0. TOTAL CARRIED TO CYCLE 2	= $	-112252.
1. ENCUMBERED FOR PROJECTS NOT YET COMPLETED (* ABOVE)	= $	400000.
2. UNENCUMBERED BALANCE	= $	-512252.

EYE TRACK PATENT PENDING

P TOTAL FROM LAST YEAR

Q NEW REVENUE AND GENERAL OBLIGATION BOND SOLD LAST YEAR

R TRANSFER FROM OPERATING BUDGET

S TRANSFER FROM STATE OR FEDERAL GOVERNMENTS

T CAPITAL PLANT INDEX (SEE GLOSSARY) SHOWS THE AREA BENEFITTED BY THE PROJECT

U THIS VALUE MAY INCLUDE AUTOMATIC PURCHASE OF LAND FROM THE MARKET WHEN THE GOVERNMENT DOES NOT OWN ENOUGH LAND REQUIRED BY A PROJECT

V THIS IS THE TOTAL AMOUNT ENCUMBERED FOR ALL MULTI-YEAR PROJECTS (SUM OF ANNUAL COSTS X YEARS TO RUN)

W IF NO MORE FUNDS ARE ADDED TO THE CAPITAL BUDGET, THE PRESENT MULTI-YEAR PROJECTS WILL REDUCE PRESENT FUNDS TO THIS AMOUNT BY THE TIME THE PROJECTS ARE COMPLETED

FINANCING OF CAPITAL FUND OF JURISDICTION 5

1. GENERAL OBLIGATION BONDS IN EFFECT --

NUM	PRINCIPAL OUTSTANDING	INTEREST RATE	CYCLES TO RUN	UNDERPAYMENT IN CYCLE 1	PAYMENT DUE IN CYCLE 2 PRINCIPAL	INTEREST	TOTAL
155	$ 50000.	4.50	10	$ 0.	$ 5000.	$ 2250.	$ 7250.
TOTAL	$ 50000.						$ 7250.

2. DEBT RETIREMENT

-- DEBT RETIREMENT MILLAGES IN EFFECT -- THROUGH CYCLE

NO.	MILLS	1	2	3	4	5	6	REVENUES -- CYCLE 1	REVENUES -- CYCLE 2
156	3.70	*	*	*				$ 2362173.	$ 2430317.
TOTAL		3.70	3.70	3.70	0.0	0.0	0.0	$ 2362173.	$ 2430317.
TRANSFERS FROM GENERAL FUND, CYCLE 1								$ 0.	
SURPLUS CARRIED FROM CYCLE 0								$ 0.	
TOTAL FUND BEFORE CYCLE 1 PAYMENTS								$ 2362173.	
TOTAL G.O. BOND PAYMENTS MADE IN CYCLE 1								$ 1.	
SURPLUS CARRIED TO CYCLE 2 @ 6.00 PERCENT INTEREST									$ 2503901.
TOTAL DEBT RETIREMENT FUNDS AVAILABLE FOR CYCLE 2 (BEFORE TRANSFERS FROM GENERAL FUND, IF ANY)									$ 4934218.

3. REVENUE BONDS IN EFFECT --

NUM	PRINCIPAL OUTSTANDING	INTEREST RATE	CYCLES TO RUN	FEES COLLECTED	PAYMENT DUE IN CYCLE 2 PRINCIPAL	INTEREST	TOTAL
153	$ 125000.	6.00	10	$ 20000.	$ 12500.	$ 7500.	$ 20000.
154	$ 200000.	6.00	20	$ 22000.	$ 10000.	$ 12000.	$ 22000.
TOTAL	$ 325000.						$ 42000.

4. CREDIT RATING OF JURISDICTION 5 IS 1

A. $ LIMIT ON NEXT G. O. BOND SOUGHT $656834240.

B. INTEREST RATE ON NEXT G. O. BOND 4.5

C. INTEREST RATE ON NEXT REVENUE BOND 6.0

X ALTHOUGH PROJECTS ARE COMPLETED IN JUST A FEW YEARS, THE BONDS WHICH SUPPORT THEM ARE USUALLY REPAID OVER A LONGET TIME AS LONG AS 20 - 30 YEARS

Y SPECIAL DEBT RETIREMENT MILLAGE WHICH MUST BE APPROVED BY THE VOTERS, MAY BE APPLIED ONLY TO PAYING OFF GENERAL OBLIGATION BONDS

Z THESE NEED NOT BE APPROVED BY THE VOTERS SINCE THEY ARE PAID OFF FROM FEES EARNED BY CONSTRUCTED FACILITIES

(IN ADDITION TO THOSE STARRED ABOVE WHICH WILL BE AUTOMATICALLY CONTINUED)

PROJ NUMB	LOCATED IN	CPI IMPACT	ACRES USED	BUDGET CATEGORY	A	TITLE	FUNDED BY BOND	CYCLES TO RUN		TOTAL COST
1	AA 17	AA		STREETS		RESURFACING OF NEIGHBORHOOD STREETS		1	$	9000.
TOTAL COST OF RECOMMENDATIONS (NOT INCLUDING LAND)									$	9000.

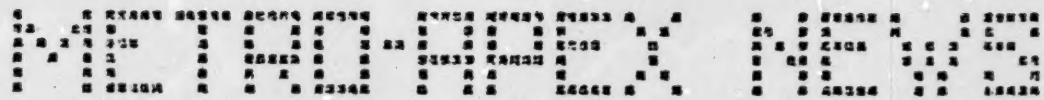
PLANNERS RECOMMEND THE FOLLOWING SPECIAL PROGRAMS BE STARTED IN CYCLE 2
(IN ADDITION TO THOSE STARRED ABOVE WHICH WILL BE AUTOMATICALLY CONTINUED)

PROG NUM.	LOCATED IN	REQUIRED CAPITAL PROJECT	A	TITLE	FUNDED BY MILL	CYCLES TO RUN		ANNUAL COST
1	AA 3	88		SUMMER RECREATION PROGRAM FOR POOR CHILDREN		3 *	$	20000.
TOTAL COST OF RECOMMENDATIONS (NOT INCLUDING LAND)							$	20000.

A THIS IS A LIST OF RECOMMENDATIONS FROM THE PLANNERS. NOT A SINGLE CENT HAS BEEN ALLOCATED. THE POLITICIAN WILL DECIDE WHICH, IF ANY, PROGRAMS ARE TO BE INITIATED

The following pages include the METRO-APEX NEWS which will give you a basis regarding some of the decisions made for Cycle 1. It will also provide you with a history of some of the problems in APEX County.

a



TEAM 1, POSITION 1 SUNDAY, JUNE 30, 1974 ANNOTATED PRINTOUT FOR CHAPTER 3

NATIONAL NEWS HEADLINES b

AUTOMOBILE PRODUCTION RECOVERS FROM SLUMP, HIGHEST SALES IN HISTORY PREDICTED.

SINGLE REAL ESTATE DEVELOPER SPEAKS IN FAVOR OF OPEN HOUSING AT CONGRESSIONAL COMMITTEE MEETING--OTHERS NEGATIVE.

U. S. CENSUS BUREAU ISSUES REPORT STATING THAT NET ANNUAL ADDITIONS TO THE HOUSING STOCK HAVE DECLINED TO 800,000 UNITS LEAVING A GAP OF 200,000 BETWEEN NEW UNITS ADDED AND NET NEW FAMILY FORMATIONS. CENTRAL CITY HOUSING SITUATION CRITICAL. c

DEFENSE SPENDING IS AGAIN AT AN ALL TIME HIGH-AS CONGRESSIONAL CRITICS WARN OF GUNS VS. BUTTER CONFLICT.

U. S. UNEMPLOYMENT RATE FOR PAST YEAR WAS 4.1 PERCENT

STATE NEWS HEADLINES b

PUBLIC PROTESTS MASS ON THE STATE CAPITOL INDUNTATES LAWMAKERS WILL SAY THEY WON'T BOW TO PRESSURE GROUP TACTICS.

STATE BOARD OF HEALTH APPROVES PLANS TO WORK WITH COUNTY HEALTH AGENTS TO CRACK DOWN ON UNSAFE SEPTIC TANKS IN URBAN FRINGE AREAS OF SEVERAL METROPOLITAN AREAS IN THE STATE. OLD SEPTIC TANKS AND INADEQUATE SEWER SYSTEMS MAKE SUB-DIVISION DEVELOPERS UNPOPULAR.

EDUCATORS PRESS STATE FOR GREATER AID TO LOCAL SCHOOL DISTRICTS, ARGUING WE ARE FALLING BEHIND THE NATIONAL LEADERS.

APEX CITED AS ONE OF THE WORST MIDDLE-SIZED CITIES WHO HAVE LET CAPITAL PLANT INVESTMENTS IN THE DOWNTOWN DETERIORATE. c

DEMOCRAT-REPUBLICAN DEADLOCK IN STATE SENATE IS BROKEN AS GOVERNOR INTERVENES TO FORCE AN EDUCATION-WELFARE PACKAGE.

WELFARE MOTHERS IN TEN COUNTIES SIT IN TO PROTEST LOW ALLOCATIONS FROM STATE AND COUNTIES. TAXPAYER ANGER OVER DEMONSTRATIONS IN STATE IS GROWING, MAKING INCREASED STATE WELFARE PAYMENTS UNLIKELY THIS YEAR.

LOCAL NEWS ITEMS b

a THE METRO-APEX NEWS IS PUBLISHED EACH CYCLE AND IS A PRIME SOURCE OF INFORMATION ABOUT CURRENT PROBLEMS AND EVENTS AND THEIR IMPACT ON APEX COUNTY.

b THE METRO-APEX NEWS FEATURES NATIONAL NEWS HEADLINES, STATE NEWS HEADLINES AND LOCAL NEWS ITEMS. THE "LOCAL NEWS ITEMS" ARE PRESENTED UNDER SUB-HEADINGS OF METROPOLITAN AND COUNTY, CENTRAL CITY, SUBURB, TOWNSHIP 1, TOWNSHIP 2, AND BUSINESS PAGE.

c NATIONAL AND STATE NEWS REFLECTS THE GENERAL STATE OF THE ECONOMY AND NEW GOVERNMENTAL POLICIES WHICH MAY IMPACT ON VARIOUS SEGMENTS OF THE APEX COMMUNITY.

d EACH YEAR CERTAIN ISSUES WILL APPEAR IN THE METRO-APEX NEWS WHICH REQUIRE DECISIONS FROM ALL ROLE PLAYERS. EACH ISSUE IS IDENTIFIED BY AN ISSUE NUMBER. THE ISSUES CONSIST OF A STATEMENT OF THE ISSUE AND SEVERAL PROPOSED ALTERNATIVE ACTIONS. EACH PLAYER SHOULD CHOOSE THE ALTERNATIVES HE FAVORS AND FILL OUT THE ELITE OPINION POLL OF HIS WORKSHEET.

e SOME ALTERNATIVES PROPOSE THE IMPLEMENTATION OF SPECIFIC PROJECTS. PROJECT NUMBERS SHOULD NOT BE CONFUSED WITH ISSUE NUMBERS.

f LOCAL NEWS ITEMS ARE IDENTIFIED BY THE ANALYSIS AREA IN WHICH THEY ORIGINATED.

g THE BUSINESS PAGE LISTS EXOFIRMS WHICH WOULD LIKE TO LOCATE IN APEX. THE FIRM WILL NORMALLY NOT LOCATE IN APEX UNLESS THE SPECIFIED CONDITIONS ARE MET.

h THE LOCATIONS PREFERED BY THE EXOFIRM ARE LISTED IN ORDER OF PREFERENCE, IE., AA 10 IS THE FIRST PREFERENCE, AA 25, SECOND CHOICE, ETC.

METROPOLITAN AND COUNTY b

RUNWAY EXPANSION NEEDED FOR AMFA AIRPORT. COST SET AT $350,000. PROJECT NO. 109. e

....PRECEDING IS ISSUE 42 d POLITICIAN'S ULTIMATE DECISION BUT ELITE OPINION SOLICITED

---- ALTERNATIVE 1 FAVOR RUNWAY PROJECT 109

---- ALTERNATIVE 2 POSTPONE AND RECONSIDER e

---- ALTERNATIVE 3 OPPOSE RUNWAY PROJECT 109

COUNTY ROAD COMMISSIONER DECLARES THAT NO 6 USED CONCRETE OR OF SMOKE ASPHALT COMPANY WILL CAUSE AN INCREASE IN COSTS OF HIGHWAY CONSTRUCTION IN THE AREA. THIS MAY BE A MAJOR DEBATE WHICH COULD ULTIMATELY MEAN HIGHER TAXES STATEWIDE.

STATE INSPECTOR LIKENS DUST PROBLEM FROM DUSTY ROADS CEMENT PLANT HAS-FILLING OPERATION TO CAUSES OF SILICOSIS IN MINING OPERATIONS.

STATE LEGISLATURE FACES WAR ON ALL OPEN BURNING LAWS. AREA SOLID WASTE MANAGER FACES MOUNTING PROBLEMS -- INADEQUATE INCINERATION, GROWING AMOUNTS OF WASTE, PUBLIC DISTRUST OF LANDFILLS, AND OUTDATED COLLECTION EQUIPMENT. AMFA MAY BE FORCED IN ITS OWN TRASH.

AA 3 f
OLD TIME RESIDENT CLAIMS, "THIS SMATTER POLLUTION IS GETTING WORSE EVERY YEAR. DONT KNOW HOW LONG I CAN HOLD OUT.

AA 4 -
INDUSTRY GROUP BLAMES HOMEOWNER BACKYARD BURNING AS PRIME CAUSE OF AMFA SMOG.

AA 5 -
SMOKE HAZE INCREASES HAZARDS OF AIRCRAFT LANDING. PILOT TELLS AMFA KIWANIS.

CENTRAL CITY b

PLANS COMPLETED FOR NEW CITY HALL. FUNDING SOUGHT. A $1.2 MILLION BOND ISSUE IS PROPOSED TO FUND A MODERN, EFFICIENT, WELL-DESIGNED CITY HALL TO REPLACE PRESENT 80-YEAR-OLD BUILDING IN AA 6. GENERAL SUPPORT OF COMMUNITY LEADERS IS ASKED FOR THIS LONG-OVERDUE IMPROVEMENT (PROJECT 86).

....PRECEDING IS ISSUE 1 POLITICIAN'S ULTIMATE DECISION BUT ELITE OPINION SOLICITED

---- ALTERNATIVE 1 FAVOR PROJECT 86

---- ALTERNATIVE 2 POSTPONE AND RECONSIDER

---- ALTERNATIVE 3 OPPOSE PROJECT 86

SUMMER DAY CAMPS PROPOSED FOR DISADVANTAGED YOUTH. STATE FUNDS, WITH CHARITY CONTRIBUTIONS, MAKE $100,000 AVAILABLE, PROVIDED CITY CAN COME UP WITH $120,000. PROGRAM NO. 10.

ANNEXATION OF MAPLE GROVE AREA (AA 12) TO GO TO A VOTE. FAVORED BY CHAMBER OF COMMERCE DUE TO POSSIBLE INDUSTRIAL SITES AT FREEWAY INTERCHANGE. THE ANNEXATION OF THIS AREA IS ALSO OPPOSED BY ANTI-TAX GROUPS BECAUSE OF THE COST OF PUBLIC IMPROVEMENTS REQUIRED. SCHOOL DISTRICT ANNEXATION TIED TO CITY VOTE - BOTH MUST BE APPROVED TOGETHER.

....PRECEDING IS ISSUE SC DECIDED BY OPINION POLL MAJORITY AND REFERENDUM

---- ALTERNATIVE 1 FAVOR ANNEXATION OF AA 12

---- ALTERNATIVE 2 AVOID THE ISSUE

---- ALTERNATIVE 3 OPPOSE THE ANNEXATION

COMMUTERS REPORT IMPAIRMENT OF SENSE OF SMELL AFTER WEEK'S TRAVEL PAST TROJAN VARNISH COMPANY IN ANALYSIS AREA 10. DANNY DINKS, WHO PASSES THE PLANT FOUR TIMES DAILY, COMPLAINS HE CAN'T SMELL HIS GIRL'S PERFUME ANYMORE.

AA 6 -
RESIDENTS PRESS DEMANDS FOR SMALL CITY PARKING LOT AS LOCAL PARKING PROBLEMS MOUNT AND DOUBLE-PARKING CREATES SNARLS.

AA 9 -
HUGE CRACKS IN LOCAL STREETS CAUSE MAJOR ACCIDENT AS DELIVERY TRUCK SPINS OUT OF CONTROL. IMMEDIATE RESURFACING A 'MUST'

AA 3 -
GROWING TRAFFIC LOAD CITED. INSPECTOR HUGGERIDGE SAYS STREET WIDENING MUST BEGIN 'BEFORE IT'S TOO LATE.'

AA 6 -
OVERLOADING OF AGED SEWER LINES BRINGS DEMANDS FOR IMMEDIATE EXPANSION OF SANITARY SEWER CAPACITY.

AA 8 -
STORM CAUSES BASEMENT FLOODING IN SEVERAL-BLOCK AREA AS STORM SEWERS OVERFLOW. ACTION DEMANDED NOW TO EXPAND CAPACITY.

AA 3 -
RECORD RAINFALL FLOODS AREA. EXPANSION OF LOCAL STORM SEWER SYSTEM NEEDED.

AA 6 -
WATER PRESSURE DEFLATED BY RAPIDLY-INCREASING USE. MAY HAMPER FIRE-FIGHTING EFFORTS UNLESS WATER MAINS ARE EXPANDED SOON.

AA 3 -
WATER MAIN EXPANSION NECESSARY TO MAINTAIN WATER PRESSURE PRESENTLY LOWERED BY INCREASED USE OF AIR CONDITIONING.

AA 7 -
WATER MAINS BURST THREE TIMES IN TWO MONTHS. RESIDENTS, UNDERSTANDABLY IRRITATED, DEMAND 'LASTING' MAJOR REPAIRS.

AA 6 -
'TAXES AND NEEDED WORK PEOPLE ARE--HOUSING PEOPLE OUT OF THE CITY ISN'T FEASIBLE,' CLAIMS RESIDENT GROUP IN PETITION.

AA 8 -
SHELTER HOUSE PROPOSED FOR PARK. LOCAL CITIZENS COMPLAIN CONSTANTLY ABOUT POOR PICNIC FACILITIES.

AA 1 -
CITY YOUTH DEMANDS NEW PLAY FIELD EQUIPMENT. OFFICIALS HOWEVER CITE WHOLESALE THIEVERY AND IMPLY YOUTHFUL RACKETEERING.

SUBURBAN JURISDICTION 2 b

AA 10 -
HOMEOWNERS ASSOCIATIONS DEMAND CITY TAKE IMMEDIATE ACTION TO RESURFACE WINTER-DAMAGED NEIGHBORHOOD STREETS.

AA 19 -
POORLY-CONSTRUCTED SANITARY SEWER SYSTEM CAUSES UNPLEASANT BLOCKAGES. RESIDENTS ARE CALLING FOR REPLACEMENT.

AA 19 -
TASTE OF WATER IS MAKING AREA RESIDENTS SICK. ONLY PERSON BENEFITING IS THE LOCAL CULLIGAN MAN.

AA 19 -
PARENTS GROUP WANTS LOCAL SWIMMING POOL SO CHILDREN WILL KEEP OFF STREETS ON HOT DAYS.

T O W N S H I P 1 (JUR. 3) b

AA 27 -
SAFETY SIGNAL INSTALLATION NECESSARY TO HALT INCREASING PEDESTRIAN ACCIDENTS AT BUSY SHOPPING CENTER INTERSECTION.

AA 21 -
AUTO INDUSTRY HOLDS KEY TO NATIONS FUTURE SAYS CHAMBER OF COMMERCE. PRESSURES POLITICIANS TO BUILD MORE PRIMARY STREETS.

AA 24 -
STORM SEWER EXTENSION DEMANDED BY IRATE CITIZENS. MILDEST SHOWERS TURN UNIMPROVED LOCAL STREETS INTO SOUPY QUAGMIRES.

AA 28 -
FIRST FLOOD OF WATER INUNDATES LOCAL STREETS.ONLY LARGE-SCALE STORM SEWER CONSTRUCTION WILL PREVENT FURTHER OCCURRENCES.

AA 23 -
LOCAL CITIZENS HOPEFUL ABOUT GETTING WATER MAIN EXPANSION. PATIENCE WORN BY MANY DELAYS MAKES IT PRIME POLITICAL ISSUE.

AA 24 -
YOUNG BOARDING INTIMIDATE TODDLERS IN LOCAL PARK. MOTHERS DEMAND CONSTRUCTION OF INDEPENDENT TOT LOTS.

T O W N S H I P 2 (JUR. 4) b

AA 21 -
STEADILY-INCREASING TRAFFIC FLOW ON PRIMARY THOROUGHFARE IN THE AREA UNDERSCORES NEED FOR WIDENING.

AA 15 -
NEW PRIMARY ROAD PUSHED BY RESIDENT GROUP TO AID COMMUTER CONGESTION PROBLEMS.

AA 22 -
DEVELOPERS CALL UPON CITY TO EXTEND LOCAL SANITARY SEWER MAINS TO AREA RIPE FOR DEVELOPMENT. NEW TRUNKLINES NEEDED.

AA 22 -
BASEMENTS FLOODED AND SLAB FOUNDATIONS ERODED AS RAINS OVERFLOW STORM SEWERS. INCREASED CAPACITY CONSIDERED MANDATORY.

AA 14 -
WATER FACILITIES FAIL TO PACE URBAN GROWTH AND PRIVATE WELLS ARE NOT RELIABLE. MAJOR WATER MAIN CONSTRUCTION URGENT.

AA 15 -
COST-BENEFIT SHOWS FOLLY OF PUBLIC ICE SKATING RINK BUT COMMUNITY GROUP CONTINUES TO PRESS ITS DEMANDS ON POLITICIANS.

B U S I N E S S P A G E b

g NEW FIRMS PLANNING TO COME TO A.P.E.X. AREA

h

SUPER CHICKENS INC (EXOFIRM NO. 4) PREFERS LOCATION IN ANALYSIS AREAS 10 25 17. WILL USE 8.40 ACRES.
WILL HAVE 200 EMPLOYEES AND WILL ADD 572000. DOLLARS TO THE TAX BASE.
POLITICIANS NOTE-- REZONING NEEDED TO V-4 (VACANT INDUSTRIAL).
STREETS COSTING 35000. DOLLARS ARE NEEDED.
REQUIRES INVESTMENT OF AT LEAST $ 200000. BY LOCAL BUSINESSMEN.

ZIPPY FROZEN FOODS INC FREEZER (EXOFIRM NO. 8) PREFERS LOCATION IN ANALYSIS AREAS 5 6 24. WILL USE 3.00 ACRES.
WILL HAVE 95 EMPLOYEES AND WILL ADD 190000. DOLLARS TO THE TAX BASE.
POLITICIANS NOTE-- STREETS COSTING 35000. DOLLARS ARE NEEDED.
REQUIRES INVESTMENT OF AT LEAST $ 25000. BY LOCAL BUSINESSMEN.

MAIL-ADS PRINTERS (EXOFIRM NO. 12) PREFERS LOCATION IN ANALYSIS AREAS 8 0 0. WILL USE 1.50 ACRES.
WILL HAVE 180 EMPLOYEES AND WILL ADD 300000. DOLLARS TO THE TAX BASE.
POLITICIANS NOTE-- REZONING NEEDED TO V-4 (VACANT INDUSTRIAL).
REQUIRES INVESTMENT OF AT LEAST $ 25000. BY LOCAL BUSINESSMEN.